FINANCIAL TIMES

EUROPE'S BUSINESS NEWSPAPER

No. 29,194 Monday December 12 1983 D 8523 B

EEC and Canada face clash over newsprint, Page 5

NEWS SUMMARY

GENERAL

Israel snub to Greece on Arafat

Israel, asked by Greece for an undertaking not to interfere with its proposed evacuation of Palestine Liberation Organisation leader Yassir Arafat and supporters from Tripoli in Lebanon, said it would give no guarantees.

Its Cabinet discussed the matter in Jerusalem yesterday. Arafat followers claimed responsibility for a Jerusalem bus bombing that killed five people last week.

In an incident in a south Lebanon village five Lebanese civilians were shot in the legs by Israeli soldiers dispersing a stone-throwing crowd.

The new ceasefire around Beirut generally held yesterday. But a committee responsible for organising the reopening of the Beirut airport failed to meet because of a boycott by one of the opposition militias. Page 2

Japan says no

Japan said British aircraft carrier Invincible could not make a goodwill visit if it was carrying nuclear weapons. Page 4

Liberal entente

Liberal and radical parties in all EEC countries except Ireland agreed in Munich a joint manifesto on which to fight the June Euro-elections. They agreed to back the deployment of U.S. cruise and Pershing missiles in Europe, despite some objections from UK delegates.

Walesa's call

In his Oslo Nobel speech, read for him by exiled Solidarity colleague Bogdan Cywinski, Peace Prize winner Lech Walesa expressed his desire for Poland to prove to the world that even the most complex situations could be solved by dialogue and not by force. Page 4

Anti-nuclear rallies

More than 30,000 anti-nuclear campaigners protested at Greenham Common airbase, England, and 31 people were arrested. More than 23,000 marched in three demonstrations in Italy. About 100 broke into a Dutch airbase considered likely to house U.S. cruise missiles. West German police arrested 46 at a U.S. air base. Page 14

President Ershad

Bangladesh leader Lieut-Gen Hossain Mohammad Ershad declared himself president, 20 months after proclaiming military rule. Page 2

British spaceman

Britain's Cabinet committee for defence and overseas policy is likely to give the go-ahead today for Britain's first astronaut, who would be responsible for launching a military satellite, probably from a U.S. space shuttle, in late 1985 or 1986.

Klansman convicted

A largely white jury in Alabama convicted a member of the white supremacist Ku Klux Klan of killing a black teenager, and recommended that he be jailed for life, without parole.

Oil tanker blaze

A fully laden Greek oil tanker, Pericles GO, was ablaze off Doha in the Gulf, and Qatar officials said it was in danger of exploding. A Dutch salvage team arrived and started work.

Sport highlights

Tennis, Melbourne: M. Wilander (Sweden) beat I. Lendl (Czech) 6-1,6-4,6-4 to win the Australian men's singles title. Women's doubles: M. Navratilova, P. Shriver (U.S.) beat A. Hobbs (GB), W. Turnbull (Aust) 6-4,6-7,6-2.

Golf, Jakarta: R. Caldwell shot a last-round 66 to help United States win the World Cup with a 865 aggregate, seven ahead of Canada.

Soccer, Tokyo: Gremio, Brazil beat Hamburg SV 2-1 in extra time to win the World Club Championship.

BUSINESS

Allianz advisers try to end deadlock

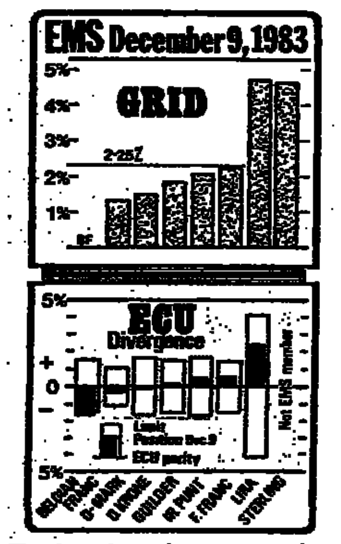
● **UK Panel on Mergers and Takeovers and merchant bankers Morgan Grenfell meet today to try to end the deadlock over the takeover for British insurance group Eagle Star. Morgan Grenfell are advising West German bidders Allianz Versicherung, with whose management they had week-end discussions. Page 14**

● **THE DOLLAR'S** strength remained the dominant factor affecting the European Monetary System last week. It rose to record levels against several currencies, including the French franc and Italian lira, and broke a ten-year high against the D-Mark.

The weakness of the D-Mark helped to improve the Belgian franc, which was aided by continued central bank intervention and the recent one-point rise in the discount rate.

While the Belgian franc remained the weakest member, it was looking set to return within its divergence limit for the first time since September.

The Dutch guilder lost ground, in sympathy with the D-Mark. The French franc showed a steady rise, helped by renewed confidence in an improving economy.



The chart shows the two constraints on European Monetary System exchange rates. The upper grid, based on the weakest currency in the system, defines the cross rates from which no currency (except the lira) may move more than 2¼ per cent. The lower chart gives each currency's divergence from its "central rate" against the European Currency Unit (ECU), itself a basket of European currencies.

● **UK MERCHANT BANKS** are preparing to lobby for changes in a proposed EEC directive on bank accounting which they fear could force them to reduce hidden reserves. Page 6

● **IRELAND** approved grants of about £26m ($40.3m) for 28 British ventures in the Republic. Page 5

● **DOMTAR**, Canada's largest fine paper maker, is spending C$773m ($622m) on modernisation and expansion in Quebec, and another C$139m in Ontario. Page 16

● **AUSTRALIA** is considering ordering two diesel-electric submarines from Dutch shipyard RDM, Page 5

● **INDIA** and the Soviet Union signed an agreement to increase their trade by 24 per cent in 1984. Page 5

● **NORTH SEA:** UK consultants are seeking support from oil companies for a new £1.5bn ($2.15bn) gas pipeline. Page 14

COMPANIES

● **BROKEN HILL** Proprietary of Australia is forming a unit trust to make an A$341m ($307m) takeover offer for Umal Consolidated, which has a major stake in a Queensland coalmine BHP is acquiring. Page 16

● **EASTERN AIR LINES** of the U.S. has been given extended credit by its banks, following wage cuts that will save the troubled group about $370m next year. Page 16

U.S. concern on deficit as budget decisions loom

BY STEWART FLEMING IN WASHINGTON AND JOHN WYLES IN BRUSSELS

Senior Reagan Administration officials are seriously concerned about the outlook for both interest rates and the federal budget deficit as they reach the critical stages of the decision making process leading up to the presentation next month of budget proposals for the fiscal year 1985.

Already, Administration officials are recognising that even on the relatively optimistic assumptions for interest rates and real growth in the economy built into its budget forecasts for 1985 and beyond, federal spending is likely to rise more rapidly than has been anticipated and budget deficits – after dipping to around $185bn in the current fiscal year – could begin to rise again.

The Washington Post reported yesterday that officials are concerned that when President Reagan presents his budget plans to Congress next month, the projected 1985 deficit will be some $20bn higher than the $170bn projected last July.

Among the factors which are contributing to the gloomier picture are demands from some departments for higher spending allocations and decisions to stick to earlier projections and ignore cuts which have already been made.

In Brussels at the weekend, Mr Donald Regan, the Treasury Secretary, did not seek to exclude the Administration from all responsibility for high interest rates and emphasised that despite next year's presidential elections, the Administration would seek spending cuts in the 1985 budget.

At a breakfast meeting with journalists on Saturday, Mr Regan said: "We are spending too much at a federal level. You will see us come up with a lot of suggested cuts. Whether we will get them is another matter."

But he repeated his warning that the chances of a fall in U.S. interest rates in the coming months are "not high. Even if they come down somewhat, they will still be historically high," he said.

In a reference to Mrs Thatcher's comment last week that high U.S. rates are "extremely damaging" to Britain and other European countries, he said: "I tried to persuade her, and I hoped I had done so, that high deficits are not the only cause of high interest rates. The deficit is one of the causes but others are fiscal policy, monetary policy and inflationary expectations."

One indication of the shift in thinking about the deficit which is now under way in Washington is the fact that some of the views of Mr Martin Feldstein, the controversial Chairman of the Council of Economic Advisers, have begun to gain ground.

A factor which has contributed to White House concern is the realisation that unless the President's 1985 budget contains the contingency tax increase backed by Mr Feldstein, the budget deficit will look even worse. This standby tax proposal, included in the President's 1984 budget plan, called for tax increases of $43bn in 1986 rising to $53bn if the budget deficit in 1985 was more than 2.5 per cent of gross national product.

Officials are becoming more aware of the effects of underlying economic assumptions on their budget predictions. Simply because of the stronger growth than expected in the economy this year, forecasts for the future will have to be scaled back making it harder to predict the earlier sharp budget deficit reductions.

British printers' union risks loss of support

BY PHILIP BASSETT, DAVID GOODHART AND JOHN LLOYD IN LONDON

BRITISH trade union leaders are preparing to decide not to give further support to the National Graphical Association (NGA), the craft print union at the centre of the UK printing dispute.

After the union was fined £525,000 on Friday for illegal mass picketing in defiance of court injunctions, the NGA's national council decided at the weekend to call a 24-hour strike on Wednesday. It emphasised the need for support from the Trades Union Congress (TUC). Tonight, senior TUC leaders in its employment policy and organisation committee will hold an emergency meeting.

Members of the NGA's national council were stressing yesterday how important tonight's meeting was to the union. One said of the future course of action by the union: "A lot will depend on what the TUC does." Mr Joe Wade, NGA general secretary, confirmed that. He said the NGA would ask the TUC to "recognise the validity and justice" of the union's action.

The indications last night were that the TUC committee will be deeply split on the issue, with a strong push from left-wingers to increase support through sympathetic action by other unions. However, leading committee members on the centre and centre-left are convinced that the NGA's struggle is now futile, and are searching desperately for a settlement that could be seen as honourable.

One possibility is the reinstatement of the six NGA men dismissed by Mr Eddie Shah, chairman of the Stockport Messenger group of newspapers in North-west England. Mr Shah dismissed the men in a dispute over the issue of a "closed shop" – the employment of union members only – and, it is suggested, the closed shop issue should now be quietly dropped.

The Messenger Group would then be "cordoned off" by the union movement, in the hope that that would ultimately put sufficient pressure on the group to conclude a closed shop at some future date.

However, left-wingers will fight hard against such an accommodation. The executive committee of the National union of Public Employees, meeting over the weekend, pledged full support to the NGA, including industrial action "if more appropriate."

Leading NGA officials clearly believe that industrial action such as that planned for next Wednesday will bring increased pressure on Mr Shah from other employers although there has been little evidence so far that he would be amenable to such pressure.

Mr Tony Dubbins, NGA general secretary-elect, said last night: "We need to create pressure on the company through many of the responsible employers in the industry who realise there are certain standards that must be obeyed."

Mr Shah said he feared more violence at the Warrington print works on Wednesday.

National and other newspaper companies are likely to bring a flood of court actions against the NGA if the planned stoppage on Wednesday goes ahead.

Consortium may switch banks to salvage $622m Thai deal

BY PETER BRUCE IN LONDON AND CHRIS SHERWELL IN SINGAPORE

AN ANGLO-FRENCH consortium, whose $622m contract to expand capacity at the Torc oil refinery near Bangkok is being threatened with cancellation, may have to drop its bankers, Barclays International and Société Générale, in an effort to assemble a financing package acceptable to Thailand.

It is believed that the consortium, Davy McKee of the UK, Technip of France and Proconfrance, a French subsidiary of the U.S. Signal group, which won the contract early last year, has until Thursday to produce fresh financing proposals.

The Thai Oil Refinery Company and the Thai Government have refused to accept strict loan conditions imposed by the consortium's two banks and have said they intend calling for new bids.

Mr Ob Vasuratna, Thailand's Industry Minister, who last month threw the project into question, was quoted in the Bangkok press last Thursday as saying new proposals would include a generous period of grace for any loan and more attractive financial terms.

He has been reported as saying that a new package could cut the project's cost to around $500m.

The contract was awarded in April last year. Last month, however, talks between the two banks and the Thai authorities collapsed, prompting Bangkok to threaten cancellation.

Both Barclays International and Société Générale have said they are still involved, but at least two London merchant banks have now entered negotiations in London and Bangkok.

About two thirds of the financing was to have come in sterling, franc and U.S. dollar credits from Barclays International and Société Générale, backed by Britain's Export Credits Guarantee Department and its French counterpart, Coface.

The package foundered on the two banks' insistence on stronger guarantees from the Thai Government for the proposed loan.

Their stand reflected nervousness about the project's commercial prospects in light of the world oil glut and nervousness about loan repayments.

Diplomats in Bangkok believe these worries are unjustified as Thailand has no serious debt problems and has never yet defaulted on its repayments.

The banks have encountered a major legal hurdle in trying to secure firmer guarantees from the Thai Government. Although the Government has a 49 per cent stake in the refinery. Thai law does not allow it to guarantee loans in any project in which its stake is less than 70 per cent.

Reagan to be pressed over IDA funding

By David Marsh in Paris

PRESIDENT Ronald Reagan is expected to come under increased pressure from EEC leaders over the next month to agree a last-minute increase in U.S. multilateral aid for the poorest developing countries.

This follows the refusal of U.S. officials at a crucial meeting of aid donors in Paris over the weekend to reconsider Washington's plan for a sharp cut in its contribution over the next three years to the International Development Association (IDA), the soft-loan affiliate of the World Bank.

The U.S. Government's planned cut in multilateral aid leaves IDA with the gravest funding crisis in its 23-year history.

Because other donor nations are refusing to increase their share of the 33-nation group's funding to make up for any U.S. shortfall, the development agency risks a cut in its resources for disbursement over the next three years to $9bn from the $12bn budget over the past three years.

This compares with a target of $16bn for 1984-87 originally set by the World Bank. All the 33 IDA donors, apart from the U.S., favour a $12bn programme for the next three years.

World Bank officials said the U.S. was "isolated" at the Paris meeting and described the mood as one of "severe disappointment" that the Americans had refused to budge.

Worried by the prospect of a sharp drop in real terms in aid to needy countries, already severely affected by the world recession, EEC heads of government, following the Athens summit, have written to President Reagan urging him to reconsider the Administration's stance on IDA.

Further efforts to influence the President directly are likely before another IDA meeting convenes in Washington in the second week of January.

Unless there is an eleventh-hour American change of mind, this looks likely to formalise an IDA ceiling of $9bn for the next three years.

It is possible that other IDA donors could agree a "parallel fund" to top up resources by perhaps a further $2bn for 1984-87.

In this case, breaking with the normal principles of multilateral aid disbursements, the contributor countries would probably bar U.S. companies from equipment

Continued on Page 14

Argentina, UK may restore diplomatic ties

BY JIMMY BURNS IN BUENOS AIRES, ROBERT GRAHAM AND MARGARET VAN HATTEM IN LONDON

THE EXCHANGE of messages at the weekend between Mrs Margaret Thatcher, the British Prime Minister and Sr Raul Alfonsin, the newly installed Argentine President, has raised the possibility that diplomatic relations may soon be restored.

Sir Geoffrey Howe, the UK Foreign Secretary, said on BBC radio yesterday that the matter would be under consideration over the next few days, but British officials insisted that there had been no change of policy. They specifically ruled out any negotiation over the sovereignty of the Falkland Islands for example in the context of a leaseback arrangement.

Mrs Thatcher's message of congratulations to President Alfonsin on his inauguration was intended as no more than a friendly gesture, it was stressed. Nothing was on offer to the new regime that had not been on offer to its predecessor, but the way in which Britain is approaching the issue is a new departure.

The belief in Whitehall, underlined by Sir Geoffrey, is that the new government will be more responsive to British offers of resumed economic and commercial links, and that dealings will be smoother and more harmonious.

Sir Geoffrey did not reject the two points implicitly advanced by President Alfonsin in a newspaper interview as conditions for a formal cessation of hostilities: reduction of the 150-mile exclusion zone around the Falklands and a freeze on construction of the new Port Stanley airport. But he pointed out that Britain would have great difficulty with the second, since the airport was needed for economic and commercial reasons.

Mrs Thatcher's initiative in sending the message is understood to have stemmed from a meeting between the Argentine Government and a British diplomat in Buenos Aires 10 days ago. Four British diplomats have been working in the Swiss Embassy there since the breaking off of diplomatic relations

More behind the scenes contacts are expected, possibly through Sr Hugo Gobbi, the UN envoy to Cyprus who is President Alfonsin's newly appointed special representative for the Falklands.

The U.S. Government has also repeated its offer to mediate between London and Buenos Aires. Mr George Bush, the U.S. Vice-President, met President Alfonsin privately on Saturday night

Washington is also understood to have offered to try to persuade U.S. banks to adopt a flexible attitude when $17bn of Argentina's $40bn foreign debt comes up for renegotiation next year.

In return, the U.S. has been seeking reassurances of the new government's non-belligerence, particularly its commitment not to use its nuclear programme for military ends.

Massey in talks on Rolls-Royce Diesels

BY MICHAEL CASSELL IN LONDON

MASSEY-FERGUSON, the Toronto-based agricultural equipment manufacturer, is negotiating to buy from Vickers its Rolls-Royce diesel engine division in the UK.

The future of the diesel engine business, based at Shrewsbury in Shropshire, has been uncertain since Vickers and Rolls-Royce merged in 1980. The group then embarked on a restructuring programme and a review of its operations.

It is widely believed that GEC has been among the potential purchasers for the diesel engine operation, but it is now understood that a sale to Massey-Ferguson, which might raise between £20m and £25m ($28.7m to $35.9m), might be close.

Vickers said last night that it had been talking to potential buyers since the summer, during which time the strategic importance of the diesel business, which supplies engines to the UK Ministry of Defence, and the future of its employees had been a priority. The company said it could make no further comment until a sale had been concluded.

Massey-Ferguson, which owns Perkins Engines of Peterborough, last night confirmed that a top management team from Toronto, headed by Mr Victor Rice, the group chairman and chief execu-

Continued on Page 14

CONTENTS

OVERSEAS NEWS

Ershad takes over Bangladesh presidency

By Sayed Kamalludin in Dhaka

Lieut-Gen Hossain Mohammad Ershad, Bangladesh's military ruler, took over the country's Presidency yesterday, 20 months after proclaiming military rule.

It is believed he will now release the major opposition leaders who have been held in "protective custody" since the violent incidents of November 28 which led to the imposition of curfew and new clamp on political activities.

Normalcy returned to the country quickly. The Government relaxed curfew hours and Gen Ershad pledged again to hold elections as scheduled. He also offered to enter into a dialogue with the opposition.

In fact, speculation suggests that he has already had discussions with the two main opposition leaders — Begum Khaleda Zia (the late President Zia's widow), leader of the seven-party Combine and the 15-party Alliance, Sheikha Hasina Wajed, daughter of the late Sheikh Mujibur Rahman and leader of the 15 per cent Alliance while they were under house arrest.

In an address to the nation last night, Gen Ershad said that he took over the President's post so that he could confine himself to the process of restoring democracy in the country.

"I am inviting the leaders of the political parties in an open mind to enter into dialogue with me to expedite the transition from military rule to democracy."

Observers here believe that Gen Ershad took over the country's top slot to accommodate the opposition's demand to hold elections prior to the presidential one and defuse a potentially dangerous situation.

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Israel refuses to guarantee safe passage for Arafat from Tripoli

BY DAVID LENNON IN TEL AVIV

ISRAEL will not give any guarantees for the safe passage of Mr Yassir Arafat, the PLO chairman, and his supporters from Tripoli, a senior official said in Jerusalem yesterday after the weekly Cabinet meeting.

At the same time the official, Mr Dan Meridor, the Cabinet Secretary, would not say if Israel planned any action to prevent the evacuation of the PLO forces under international protection.

The Greek Government, which has offered to provide the ships to evacuate the PLO forces from Lebanon, asked Israel for an undertaking that its navy would not interfere with the evacuation. Mr Meridor refused to say specifically what had been Israel's response to this request.

Israel's policy, he said, was not to guarantee the safe passage of murderers, and it does not believe that the international community should so either.

The question of such guarantees arose after the shelling on Friday by the Israeli navy of a base beside Tripoli belonging to the pro-Arafat wing of the PLO. Officials in Jerusalem were quoted later as saying that this attack "should not be viewed as an effort to prevent Arafat from leaving Tripoli."

Israel is apparently happy to keep Mr Arafat guessing about its intentions, as it sees no reason why it should ease the pressure on him or his followers who last week claimed responsibility for the bomb explosion on a bus in Jerusalem which killed five people.

Patrick Cockburn in Beirut writes: Efforts to reopen Beirut airport and reestablish the ceasefire faltered yesterday when the ceasefire committee failed to meet because of a boycott by one of its members.

It had been hoped that the airport, which has been closed for 11 days, would open today.

Members of the Amal Shiah militia group said they would not attend the ceasefire meeting because Moslems were being kidnapped on the coastal road.

Further south the security situation behind Israeli lines continued to deteriorate yesterday when Israeli troops shot five demonstrators in the legs.

Bahrain offshore role 'dwindling'

BY MARY FRINGS IN BAHRAIN

THERE WAS little comfort for Bahrain offshore bankers from the Saudi Arabian monetary agency (Sama) yesterday, despite a statement by Mr Mohamed Abal Khail, the Saudi Finance Minister that the offshore banks were a source of strength for the region "and none of us wish to disturb their presence here."

Speaking at a two-day conference on banking issues in the context of the Gulf Co-operation Council (GCC) Sheikh Hamad al Sayyari, the acting governor of Sama, predicted a dwindling role for international banks in the Saudi market, although he told them to use their imagination in finding new ways of serving Saudi clients.

He said the January 15 Sama circular placing restrictions on syndicated lending in Saudi rials (SR) had been issued first to restrain the growing internationalisation of the currency and second to stimulate the domestic corporate banking capabilities of the Saudi banks.

"To permit the use of the SR for third country transactions or to encourage its use as a reserve currency or trading currency is against our policy," he said, adding that the growth of an external SR market meant that important banking decisions were being taken outside the country.

"That, in turn, meant that Saudi banks were not taking the trouble to develop their credit departments and were sitting back and letting the OBUs (Offshore Banking Units) take the risk for them."

Sheikh Hamad said he was sure there was enough international business carried out in co-operation with domestic banks to provide a living for the OBUs. But he forecast that eventually such business would be mainly in international currencies. At present, a quarter of the 77 Bahrain OBUs' total liabilities of around $57bn are in regional currencies, dominated by the Saudi rial.

Sheikh Hamad expressed satisfaction with the growing tendency towards more formal banking regulation "even in countries which had had a very informal approach," and rejected criticism of Sama's conservative supervisory policies. "We have not waited for a banking crisis to react to," he pointed out. "We have believed in taking preventive measures from the outset."

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Mr Khail highlighted the need to tap domestic and offshore resources to increase the role of the private sector in GCC development. "The large petrochemical project in the GCC will prove to be a focal point in the mobilisation of private capital," he said.

"When new downstream ventures take shape there will be a role for the commercial banks, including the offshore banks. Here in Bahrain we have the foreign banks within the GCC. We can benefit from the professional experience and advice of the foreign banking community in the area."

From the Bahraini side Mr Ibrahim Abdul Karim, the Finance Minister, gave an overview of the international economic situation and its repercussions in the Gulf. He said Bahrain's economy had suffered from the decline in oil revenues and growth in real GDP would probably be under 5 per cent this year, compared with 6 per cent last year and 9 per cent in 1981.

The governor of the Bahrain monetary agency, Mr Abdulla Saif assured the conference that the implementation of the GCC policy did not mean that there would be a smaller place in Bahrain for foreign banks.

"Fair competition is something we in Bahrain greatly value and it would be completely contrary to our market philosophy to seek to exclude foreign banks. The international nature of Bahrain must be preserved and we shall always act with this in mind."

CONTRACTS & TENDERS

NOTICE TO CONTRACTORS

NATIONAL ELECTRIC POWER AUTHORITY OF NIGERIA

132kV SUBSTATION PROJECT No. 25054

FOR MAKERI INDUSTRIAL (JOS), TALATA MAFARA, SOKOTO, GUSAU AND BIRNIN KEBBI SUBSTATIONS

The National Electric Power Authority of Nigeria intends to construct new substations at Talata Mafara and Makeri and modify and extend the remainder of the stations listed above.

This will involve design, manufacture, supply and erection of 132 kV and 33 kV outdoor and 11 kV indoor switchgear and ancillary equipment together with construction of the necessary civil engineering works. Tenders will be accepted only from manufacturers of 132 kV and 33 kV switchgear as a minimum requirement.

Tender documents will be available on 19th December 1983 from:

Omo Uwa & Partners 33 Commonwealth Avenue Palm Grove Estate, PMB 21308 Ikeja, Lagos, Nigeria Tel: 843775 Telex: 20117 (NET TDS) NG TDS 100	or	Ewbank Preece Power & Water Ltd Preece House 97-105 Davigdor Road, Hove E. Sussex BN3 1RE, England Tel: (0273) 724533 Telex: 87330 (EPLBTN) G

upon payment of a non-returnable deposit of Naira 500 to Omo Uwa & Partners, or its equivalent sterling to Ewbank Preece Power & Water Limited.

A set of documents will consist of three copies; two completed copies are to be delivered by hand or registered post by noon Nigerian time on 19th March 1984, to:

THE DIRECTOR OF PURCHASING DEPARTMENT
NATIONAL ELECTRIC POWER AUTHORITY
PMB 12030, 24/25 MARINA, LAGOS, NIGERIA

International Bid Notice

for Lot-Trans of Ashuganj
2 x 150 MW Steam Power Plant
Comilla, Bangladesh

Bangladesh Power Development Board has obtained financing from the Kuwait Fund for Arab Economic Development (KFAED) and Organisation of Petroleum Exporting Countries (OPEC) the proceeds of which would be used for construction of Ashuganj-Ghorasal 230 KV transmission line. Procurement procedure for the project will be in accordance with the guide lines of the financing institutions.

Bangladesh Power Development Board invites experienced firms to tender for the manufacturing, supply, installation and commissioning of high voltage sub-station and 230 KV Ashuganj-Ghorasal transmission line. Firms wishing to tender for the lot should apply for tender documents to be supplied in Dhaka, Bangladesh or Frankfurt, Federal Republic of Germany at the addresses below from 15 December 1983 until ....

BANGLADESH POWER DEVELOPMENT BOARD
Attn: Director, Purchase, Wapda Building
Motijheel, Dhaka-2, Bangladesh

LAHMEYER INTERNATIONAL GMBH
Consulting Engineers
Attn: Project Manager, Lyoner Strasse 22, PO Box No. 710230
D-6000 Frankfurt (Main) 71, Federal Republic of Germany

The application should be accompanied by bank draft/pay order of US$600 or Taka 13,000 as a fee for the Tender Document which is non-refundable and the same is to be drawn in favour of Bangladesh Power Development Board.

Sealed complete tender in two separate envelopes one for technical proposal and other for financial offer shall be submitted to:

The Secretary
BANGLADESH POWER DEVELOPMENT BOARD
Wapda Building, Motijheel, Dhaka-2, Bangladesh
Telex: 65617 BPD BJ

not later than 15 February 1984 12.00 noon. The bids will be opened on the same day at 2.00 pm in presence of the bidders, if any.

Tenderers should obtain the document and submit their offer in person.

COMPANY NOTICE

Ford

BEARER DEPOSITARY RECEIPTS

On 13 October 1983, the Ford Motor Company declared a 3-for-2 STOCK SPLIT in the form of a 50 per cent STOCK DIVIDEND on the Capital Stock of the Company to Stockholders of Record 1 November 1983.

B.D.R.'s representing UNITS of 1/20th of a full common share in the denominations of 1; 5; 10; 50; 100; and 500 will be available for distribution about 14 DECEMBER 1983.

The Board of Directors also declared a CASH DIVIDEND of 45 cents (gross) per share, on the Company's Common Stock outstanding prior to the STOCK DIVIDEND. Accordingly, in respect of the Bearer Depositary Receipts the following distribution will become payable on or after 14 DECEMBER 1983.

Gross Distribution per Unit		2.2500 cents
Less 15% U.S.A. Witholding Tax		0.3375 cents
		1.9125 cents
Converted at 1.4625	=	£0.01307692

Claims should be lodged with the DEPOSITARY; National Westminster Bank PLC, Stock Office Services, 3rd Floor, 20 Old Broad Street, London EC2N 1EJ.
In addition to the usual form for claiming cash, a special form exists for claiming stock. Both forms should be completed and are obtainable from the above address.

United Kingdom Banks and Members of the Stock Exchange should mark payment of the "STOCK AND CASH" dividends in the appropriate square on the back of the certificate.

All other claimants must complete the special forms and present these at the above address together with the certificate(s) for marking by the National Westminster Bank PLC. Postal applications cannot be accepted.

COMPANY NOTICES

COMISION FEDERAL DE ELECTRICIDAD (CFE)
8% 1972/1987
U.S.$20,000,000

On November 28, 1983, Bonds for the amount of U.S.$1,650,000 have been drawn for redemption in the presence of a Notary Public.

The Bonds will be reimbursed coupon due February 1, 1985 and following attached on and after February 1, 1984.

The drawn Bonds are those, NOT YET PREVIOUSLY REDEEMED, included in the range beginning: at 3649 up to 13845 incl.

Amount unamortized: US$5,150,000.

THE TRUSTEE
FINIMTRUST S.A.

Luxembourg.
December 12, 1983.

CITY OF LIMA
(THE HONOURABLE PROVINCIAL COUNCIL OF LIMA)
5% FIRST MORTGAGE BONDS 1911

NOTICE IS HEREBY GIVEN that for the Sinking Fund of the above Loan for January 1984, Bonds for an original nominal amount of £400 have been purchased and £5,700 drawn for redemption.

The following are the numbers of the Bonds drawn for redemption on 1st January 1984 after which date all interest thereon will cease. Payment will be made at the new par value of £171 per £100 Bond in accordance with the Republic of Peru Offer dated 13th January 1955.

57 Bonds of £100 Original Nominal Value Each

415	464	619	1015	1284	1282
1369	1438	1554	1617	1791	1805
1889	2135	2178	2244	2281	2295
2308	2324	2435	2437	2486	2620
2663	2690	2709	2733	2900	3107
3157	3291	3491	3493	3818	3937
4077	4096	4209	4312	4368	4538
4577	4639	4647	4809	4948	4991
5118	5388	5408	5415	5809	5811
5753	5817	5999			

The above Bonds should be presented at the London Offices of Lloyds Bank International Limited, listed on the appropriate forms and must bear all coupons subsequent to 1st January 1984 otherwise the amount of the missing coupons will be deducted from the redemption proceeds.

CREDIT D'EQUIPEMENT DES PETITES ET MOYENNES ENTREPRISES
Bond Issue of US$250,000,000
Floating Rate Notes 1982/1992

The rate of interest applicable to the interest period from December 12 1983 up to June 12 1984 as determined by the reference agent is 10⅝ per cent per annum namely US$540.10 per note of US$10,000.

PROVINCE OF MANITOBA
$9\frac{1}{4}\%$ 1975/1985
UA 30,000,000

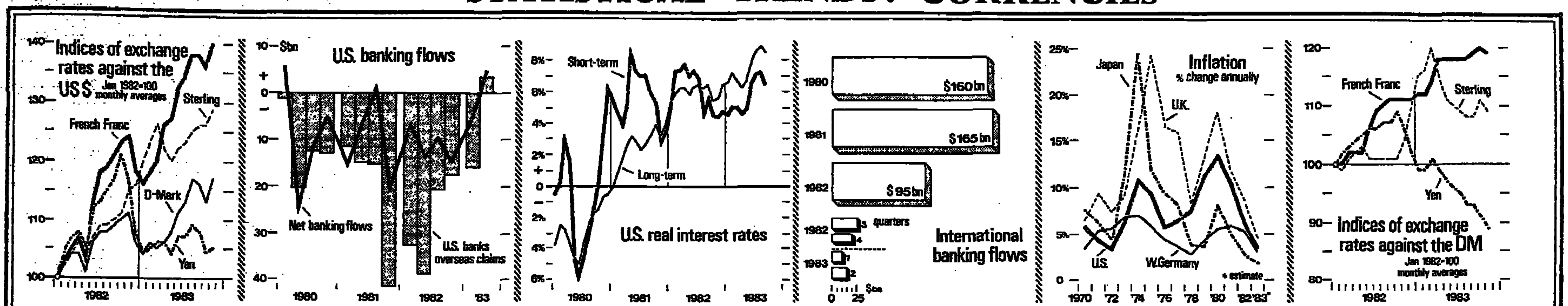
NOTICE IS HEREBY GIVEN to Bondholders that, during the twelve-month period ending December 8, 1983 nominal UA 300,000 of above-mentioned Bonds have been purchased by the Province.
Outstanding amount: UA 25,415,000
Luxembourg, December 12, 1983

The Fiscal Agent
KREDIETBANK
S.A. Luxembourgeoise

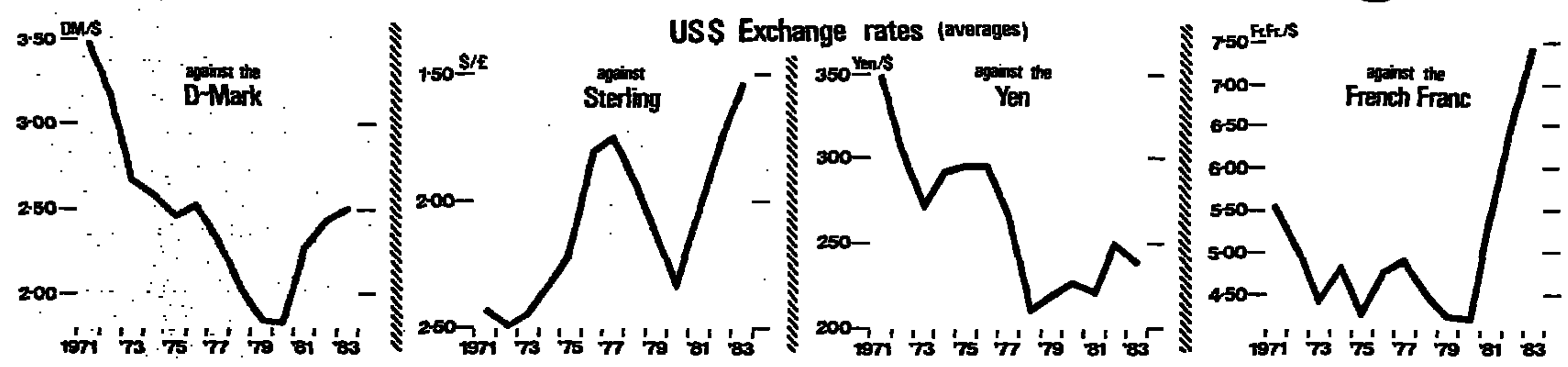
PERSONAL

REMEMBER
a deserted friend with a tribute that blooms in lasting happiness for old people. There is no more fitting memorial to a loved name than to link your regard with enduring work for the lonely or frail. Every pound you give towards a Day Centre or medical assistance among the elderly people in great need achieves a great deal thanks to volunteers all over Britain. Please send you gift with the name you wish to commemorate to: The Hon. Treasurer, The Rt. Hon. Lord Maybray-King, Help the Aged, Room FT4M, 32 Dover Street, London W1A 2AP.

STATISTICAL TRENDS: CURRENCIES



Dollar gains strength from collapse of international bank lending



THE U.S. dollar has gone from strength to strength in 1983 against the background of a continuous deterioration in the U.S. current account balance, leading to an estimated $35bn deficit in 1983. Interest rates remained stable but high, providing some support for the dollar. However there was a substantial reduction in net inflows to U.S. financial assets in the second quarter: purchases of U.S. equities fell, while American investors increased their purchases of overseas securities.

The strength of the dollar therefore seems to be based on the collapse of international bank lending and the reduction in liquidity of the dollar. The slow growth in lending contributed to the shortage of dollars in the foreign exchange markets, helping to keep the dollar high. Overseas lending by U.S. banks moved from $16bn in the first quarter to a net repayment of loans amounting to $3.4bn in the second quarter.

Over the past two years only the yen among the world's major trading currencies has held its position against the dollar.

Exchange rates are a key variable in international competitiveness, and a measure of the change in competitiveness can be derived by adjusting exchange rates for relative price changes. On this basis, the competitive position of the dollar at the end of October this year was similar in real terms to that of the pound sterling and the yen, when compared with an average of the years 1973-77. But the dollar was about 30 per cent less competitive against the Deutschemark than in those years. The West German currency has also improved in competitiveness against the pound and the yen compared to its average 1973-77 level. This makes for significant gains to West German exporters.

Although the U.S. is heading for a record current account deficit, while Japan looks forward to a record surplus, the outlook for both economies is for sustained real growth in 1984. Inflation in the advanced industrialised economies remains under control, while expansion in the OECD economies should lead to export growth in the Less Developed Countries (LDCs), leading to a reduction in their debt burden.

Interest rates, though stable in nominal terms, have risen in real terms over the past two years due to falls in the rate of inflation. Interest rate differentials remain in the U.S.'s favour.

To international investors in the main equity markets Japan has offered the best opportunities in 1983 with the combination of strong local growth and a strong yen.

International bank lending could be set to resume in 1984, although it is very unlikely to increase at the rate of 1976-81. This resumption of lending should ease the pressure on the LDCs to some extent. It is also likely to lead to a fall in the dollar. Any action to raise interest rates to counteract this would quickly cancel out gains to the LDCs from renewed growth in the OECD area.

REAL EXCHANGE RATE INDICES U.S.$

1973=100	Average 73/77	78/82	81	82	End Oc. 83
U.S.$/DM	103.1	103.0	86.3	79.8	72.9
U.S.$/£	105.9	130.6	132.7	117.3	102.4
U.S.$/Yen	108.4	124.6	118.2	101.6	106.4
REAL EXCHANGE RATE INDICES DM					
DM/£	102.9	129.8	153.7	147.0	140.5
DM/Yen	103.3	122.3	137.1	127.2	146.0

Source: Phillips and Drew

Note: A rise in an index means that first currency has become more competitive.

INTEREST RATE DIFFERENTIALS

U.S. — OTHER COUNTRY

	UK	GERMANY	JAPAN
1977	0.34	3.24	0.95
78	−1.93	6.87	5.93
79	−3.3	5.00	5.69
80	2.85	7.40	7.80
81	−2.91	2.28	6.48
82	−1.69	2.61	2.01
83†	−0.2	3.56	2.74

† Latest available.

Source: Morgan Guaranty

Portfolio Investment U.S.A.

		1980	1981	1982	1983 Q1	1983 Q2
INFLOW:	Equities	...4.2	5.1	3.6	11.5	6.9
	Other	3.6	5.1	9.5	12.1	14.7
OUTFLOW:	Equities	−2.3	−0.2	−1.4	−4.0	−7.4
	Other	−1.2	−5.5	−6.6	−3.2	−5.5
Net foreign official purchases of U.S. Govt. Securities		11.9	6.3	5.1	10.6	7.4

Source: Wood McKenzie

Long Term Capital Flows

$bn annual rate		1981	1982	1983 Q1	1983 Q2
U.S.A.:	Portfolio	4.5	5.2	16.4	8.7
	Direct	12.3	13.4	8.1	3.7
JAPAN:	Portfolio	3.24	0.27	2.22	−2.70
	Direct	−4.71	−4.10	−3.75	−3.82
Germany:	Portfolio	−2.39	−3.66	−3.84	−2.24
	Direct	−3.28	−2.31	−3.41	−1.36
UK:	Portfolio	−7.57	−10.12	−9.49	−3.83
	Direct	−7.49	−2.61	1.43	1.62

Source: Wood McKenzie

Current Account Balances

	U.S.A.	UK	GERMANY $bn	FRANCE	JAPAN
1976	4.4	−1.6	3.9	−3.4	3.7
1977	−14.1	−0.04	4.1	−0.4	10.9
1978	−14.8	1.9	9.0	7.0	16.5
1979	−0.5	−1.8	−6.1	5.2	−8.7
1980	1.5	6.8	−15.7	−4.2	−10.7
1981	4.6	13.3	−6.4	−7.3	4.8
1982	−11.2	9.3	3.3	−12.0	6.9
1983*	−35.0	1.1	4.0	−6.0	20.0

* Estimate

Real GNP Growth

	U.S.A.	UK	W. GERMANY	FRANCE	JAPAN
1976	4.9	3.6	5.4	5.2	5.3
1977	5.2	1.3	3.1	3.1	5.3
1978	4.7	3.7	3.1	3.8	5.0
1979	2.4	1.6	4.1	3.3	5.1
1980	−0.3	−2.0	1.9	1.1	4.9
1981	2.3	−2.0	0.2	0.2	4.0
1982	−1.9	1.8	−1.1	2.0	3.0
1983*	3.4	2.6	1.1	0.1	3.1

* Estimate.

Commentary by Our Economics Staff; data analysis by Financial Times Statistics Unit; charts and graphs by Financial Times Charts Department.

Interest Rates

	U.S.	UK	GERMANY	JAPAN
NOMINAL				
1976	4.75	14.38	4.80	6.75
77	6.84	6.50	3.60	5.69
78	10.57	12.50	3.70	4.64
79	13.70	17.00	8.70	8.01
80	17.60	14.75	10.20	9.80
81	12.78	15.69	10.50	6.30
82	8.81	10.50	6.20	6.80
83†	9.36	9.56	5.80	6.62
REAL				
80	5.12	−0.55	4.90	2.00
81	3.18	3.79	4.00	2.20
82	4.31	4.30	1.50	4.40
83†	6.76	4.86	3.00	5.42

* Bond equivalent yields on major short term money market instruments. † Latest available.

Source: Morgan Guaranty, IMF

% Return on Equities

Year ending Oct. 1983

Investing from	Investing in U.S.A.	UK	JAPAN	GERMANY
U.S.A.	27.0	10.7	51.0	48.3
UK	42.4	24.2	69.3	66.3
Japan	7.3	−6.4	27.6	25.4
Germany	30.6	13.9	55.2	52.5

* Includes exchange rate gain or loss.

Source: Wood McKenzie

Money Supply % Change

	1976/78	1979	1980	1981	1982	1983*
U.S.A.	7.6	7.4	7.3	5.0	8.5	9.2
Japan	11.4	3.0	−2.0	10.0	5.7	4.9
UK	15.8	8.6	7.3	8.1	10.6	9.0
Germany	9.8	3.9	4.2	−0.8	6.8	10.5

* Estimate

Source: IMF, Simon & Coates

Trade Weighted Indices

end of period 1975=100

	U.S.	UK	GERMANY	JAPAN
1976	105.0	80.7	111.6	105.3
77	99.0	84.8	119.8	125.4
78	91.8	82.5	125.4	148.2
79	93.5	89.9	131.6	118.9
80	95.1	101.6	122.3	144.6
81	107.2	90.9	122.3	145.1
82 Q1	116.1	91.0	123.0	133.7
Q2	120.5	91.3	125.0	132.6
Q3	123.5	91.5	125.1	127.9
Q4	118.5	84.3	128.9	143.9
83 Q1	122.7	79.5	131.1	146.1
Q2	124.8	84.3	128.1	147.1
Q3	126.7	82.9	126.3	153.0

Source: FT

OVERSEAS NEWS

BASE LENDING RATES

A.B.N. Bank	9%	Heritable & Gen. Trust	9%
Allied Irish Bank	9%	■ Hill Samuel §	9%
Amro Bank	9%	C. Hoare & Co. †	9%
Henry Ansbacher	9%	Hongkong & Shanghai	9%
Arbuthnot Latham	9%	Kingsnorth Trust Ltd.	10%
Armco Trust Ltd.	9%	Knowsley & Co. Ltd.	9½%
Associates Cap. Corp.	9½%	Lloyds Bank	9%
Banco de Bilbao	9%	Mallinhall Limited	9%
Bank Hapoalim BM	9%	Edward Manson & Co.	10%
BCCI	9%	Meghraj and Sons Ltd.	9%
Bank of Ireland	9%	Midland Bank	9%
Bank Leumi (UK) plc	9%	■ Morgan Grenfell	9%
Bank of Cyprus	9%	National Bk. of Kuwait	9%
Bank of Scotland Ω	9%	National Girobank	9%
Banque Belge Ltd.	9%	National Westminster	9%
Banque du Rhone	10%	Norwich Gen. Tst.	9%
Barclays Bank	9%	R. Raphael & Sons	9%
Beneficial Trust Ltd.	10%	P. S. Refson & Co.	9%
Bremar Holdings Ltd.	9%	Roxburghe Guarantee	9½%
Brit. Bank of Mid. East	9%	Royal Trust Co. Canada	9%
■ Brown Shipley	9%	Standard Chartered ‖	9%
CL Bank Nederland	9%	Trade Dev. Bank	9%
Canada Perm't Trust	10%	TCB	9%
Castle Court Trust Ltd.	9½%	Trustee Savings Bank	9%
Cayzer Ltd.	9%	United Bank of Kuwait	9%
Cedar Holdings	9%	United Mizrahi Bank	9%
■ Charterhouse Japhet	9%	Volkskas Intnl. Ltd.	9%
Choulartons	10½%	Westpac Banking Corp.	9%
Citibank Savings ¶	10½%	Whiteaway Laidlaw	9½%
Clydesdale Bank	9%	Williams & Glyn's	9%
C. E. Coates	9½%	Wintrust Secs. Ltd.	9%
Comm. Bk. of N. East	9%	Yorkshire Bank	9%
Consolidated Credits	9%		
Co-operative Bank *	9%		
The Cyprus Popular Bk.	9%		
Dunbar & Co. Ltd.	9%		
Duncan Lawrie	9%		
E. T. Trust	9½%		
Exeter Trust Ltd.	10%		
First Nat. Fin. Corp.	11%		
First Nat. Secs. Ltd.	10½%		
Robert Fraser	10%		
Grindlays Bank ‡	9%		
■ Guinness Mahon	9%		
■ Hambros Bank	9%		

■ Members of the Accepting Houses Committee.
* 7-day deposits 5.5%, 1-month 5.75%. Short-term £8,000/12 months 8.1%.
† 7-day deposits on sums of: under £10,000 5½%, £10,000 up to £50,000 6½%, £50,000 and over 7½%.
‡ Call deposits £1,000 and over 5½%.
‖ 21-day deposits over £1,000 6½%.
§ Demand deposits 5½%.
¶ Mortgage base rate.
Ω Money Market Cheque Account = 8.75%. Effective annual rate—9.11%.

Japan may stop visit by Invincible

By Jurek Martin in Tokyo

MR YASUHIRO NAKASONE, the Japanese Prime Minister, has said that he requires assurances from Britain that its aircraft carrier, the Invincible, is not carrying nuclear weapons before allowing the ship to visit Japan next year.

Mr Nakasone emphasised yesterday that Japan's three non-nuclear principles, which do not permit the manufacture, use, or introduction of nuclear weapons into the country, would have to be satisfied.

The news of a possible visit by the Invincible, which was denied dry dock facilities in Sydney by the Australian Government last week because similar assurances on its weaponry were not forthcoming, constitutes a potential embarrassment to Mr Nakasone in the last week of the Japanese general election campaign.

The Prime Minister has been frequently criticised by the Opposition and elements within his own party for allegedly being too willing to promote a renaissance of Japanese military power and for seeking to move Japan closer to the Nato orbit.

The local Press, quoting Japanese Defence Agency sources, reported over the weekend that the Invincible was expected to visit this country in February. While refusing to confirm or deny the date, the British Embassy here said last night that a request for permission for what was described as "a goodwill visit" had already been lodged with the Foreign Ministry.

However, Embassy officials stated that the timing of any visit was unrelated to the Invincible's current mechanical difficulties which resulted in the request to use dry dock facilities in Sydney.

Our Foreign Staff adds: The Ministry of Defence in London said that Britain's nine-ship Far East task group, of which Invincible is the flagship, would be sailing in the Pacific until early next year, and "no firm decision" had been made on future ports of call. He said it was the Ministry's policy neither to confirm nor deny the presence of nuclear weapons aboard its ships.

Walesa in Nobel call for dialogue

BY OUR OSLO CORRESPONDENT

MR LECH WALESA, the leader of Poland's Solidarity union and winner of this year's Nobel peace prize, said in a speech read here yesterday in his absence that "the difficult problems which Poland is now facing can be resolved only through a real dialogue between state authorities and the people."

Mr Walesa did not travel from Poland to attend the award ceremony: in the speech he said: "Poland will prove to the world that even the most complex situations can be solved by a dialogue and not by force." He added that "we are ready for the dialogue."

Respect for civil and human rights in Poland and for the national identity of the country is "in the best interests of all Europe." he said.

"A permanent economic crisis in Poland could have serious repercussions for Europe, he said. "Thus, Poland ought to be helped and deserves help."

The peace prize was handed over on Saturday to Mr Walesa's wife, Danuta. She arrived on Friday with their son, Bogdan, and was due to return home today. On Saturday morning, Mrs Walesa went to the Royal Castle for a short meeting with King Olav.

At the airport and wherever else she appeared in public, Mrs Walesa was followed by a horde of journalists and was warmly applauded by onlookers, among them several exiled Poles.

Before handing over the prize, the chairman of the Norwegian Nobel committee, Mr Egil Aarvik, said that the campaign for human rights necessarily is "an inseparable part of the struggle for peace." Mr Aarvik said that the committee had evaluated Mr Walesa's contribution as "being of essential importance in the campaign to establish the universal freedom of organisation in all countries."

He found it remarkable that "working people's elementary rights" can be denied, irrespective of which ideology or economic system they live under.

The seat intended for Mr Walesa was left empty during the ceremony. "Let us, therefore, try even harder to listen to the silent speech from his empty place," Mr Aarvik said.

Christopre Bobinski adds from Warsaw: Mr Walesa attended a church service for Poland's Nobel prize-winners on Saturday and another well-attended mass yesterday.

Mr Mieczyslaw Rakowski, the Polish Government's deputy Premier, said on Saturday at the Gdansk Lenin shipyard that Mr Walesa and the Solidarity leadership do not have the answer to the country's problems.

Coming shortly before the second anniversary on Tuesday of the introduction of martial law and Friday's anniversary of deaths in Gdansk in 1970 riots against food price rises, Mr Rakowski accused the Solidarity leadership of exploiting these anniversaries for their own ends.

Mr Walesa met Mr John Davies, the U.S. chargé d'affaires on Saturday to discuss his appeal for an end to sanctions: on Friday Mr Walesa intends to make a major speech and the underground has called for demonstrations.

In the resulting war of nerves the Government media have stepped up reports of underground activists in major cities like Gdansk and Katowice while police patrols on the streets have also been strengthened.

Mr Rakowski said that Solidarity leaders "want to convince themselves and their countrymen that they still mean something and to give imperialism the argument that Poland is still a country of unrest."

Negotiations for Botha meeting with Machel

By Bernard Simon in Johannesburg

NEGOTIATIONS are taking place to arrange a meeting between Mr P. W. Botha, the South African Prime Minister, and Mr Samora Machel, the President of Mozambique, according to the South African Foreign Minister Mr Pik Botha, who returned from a visit to several European countries over the weekend.

Mr Pik Botha said in an interview with a local newspaper that "we are in a process of negotiations. It is progressing step by step, but each step has to be carefully laid."

Should a meeting take place, discussions are likely to centre on South African support for Right-wing rebels inside Mozambique, Pretoria's complaints of Mozambican assistance to black nationalist guerrillas, economic ties between the two countries and obstacles to a settlement in Namibia.

Mr Botha said that, following his discussions in Europe, he will be submitting various unspecified proposals on Namibia to the Prime Minister. He reiterated, however, South Africa's insistence that any settlement be linked to the withdrawal of Cuban troops from Angola.

Top feminist group backs Mondale for President

BY STEWART FLEMING IN WASHINGTON

MR WALTER MONDALE has won the support of the National Organisation for Women (NOW) for his campaign for President of the U.S.

The decision by the leading feminist group in the country strengthens Mr Mondale's position as front-runner for the Democratic Party's nomination as its presidential candidate. It is the first time in its 17-year history that NOW has endorsed a candidate for the Presidency.

It also starkly underlines the problems which President Ronald Reagan is having in mustering support among women voters who are often more critical than men of the President's hard-line foreign policy.

The polls also show that they are generally less supportive than men of the President's efforts to chip away at Government spending by reducing social programmes.

The NOW endorsement adds to an impressive list of organisations which have come out in favour of the former Vice-President, putting him ahead of his principal rival for the Democratic Presidential nomination, Senator John Glenn. The list includes such traditional Democratic bastions as the AFL-CIO, organised labour's umbrella organisation.

Both NOW and the AFL-CIO have extensive nationwide organisations of activists and officials who can be galvanised into action to motivate voters in support of their candidate.

Over the weekend, Mr Mondale also secured the support of the black wing of the State of Alabama's Democratic Party. The real significance of this decision, however, lay in the fact that the group decided not to endorse Mr Mondale's black rival for the Presidency. Mr Jesse Jackson, as its candidate.

Instead, it agreed as a compromise to endorse Mr Jackson as Mr Mondale's Vice-Presidential running-mate. The move suggests that in the South, at least, Mr Mondale may have less to fear from Mr Jackson's decision to run against him for the Democratic nomination.

The decision by NOW to endorse Mr Mondale does not guarantee Mr Mondale's overwhelming support from women. The feminist organisation is seen by many rival women's groups as too radical on some issues, and, assuming he runs for President again, as now seems likely, Mr Reagan will attempt to exploit these divisions.

U.S. troops may quit Grenada soon

By Stewart Fleming in Washington

PRESIDENT Ronald Reagan seems likely to achieve the politically important goal of bringing most U.S. troops home from Grenada before Christmas.

The White House announced over the weekend that more than 2,000 U.S. military personnel — the bulk of the force which invaded the island in October — will be leaving by Thursday of this week.

It added, however, that some 300 U.S. military police and technicians who are operating under the banner of the Organisation for East Caribbean States will remain to provide security assistance for the Governor-General, Sir Paul Scoon, who has the task of reconstituting the Government.

Hugh O'Shaughnessy adds: In St George's, capital of Grenada, several streets are draped with banners asking U.S. forces to stay, praising the Reagan Administration, and criticising Britain's Prime Minister, M[illegible] Margaret Thatcher.

In recent days, the busi[illegible] community and political gr[illegible] have been [illegible] expr[illegible] support [illegible] Sir Scoon [illegible] missio[illegible] strati[illegible] Wed[illegible]

Bush dashes hopes for Ortega talks

Mr George Bush, the U.S. vice-President, left Buenos Aires yesterday having dashed expectations that he would use the opportunity of Sr Raul Alfonsin's inauguration for a meeting with Sr Daniel Ortega, the Nicaraguan leader, Jimmy Burns writes from Buenos Aires.

Mr Bush told a late night Press conference on Saturday that he had simply said "hello" to Sr Ortega during a morning reception, hosted by Sr Alfonsin, but denied there had been any bilateral meeting.

However, intense diplomatic efforts aimed at bringing the U.S. and Nicaragua closer to a settlement in Central America were continuing here yesterday with the participation of Costa Rica, several European leaders led by Sr Felipe Gonzalez, Prime Minister of Spain, and officials of the Panamanian, Mexican, Venezuelan and Colombian delegations which make up the Contadora grouping.

There were unconfirmed reports yesterday that members of Mr Bush's delegation including Mr Richard Stone, the U.S. Central American envoy, and Mr Anthony Motely, the Under-Secretary of State for Latin American Affairs may have stayed behind in Buenos Aires for a series of informal contacts with the Nicaraguan delegation.

Islamic conference deadlock on Gulf war

Moslem foreign ministers yesterday decided to refer a heated dispute over the Iran-Iraq war to an Islamic summit in Morocco next month, after an all-night sitting failed to break a deadlock over the three-year-old conflict, Reuter reports from Dhaka, Bangladesh.

The 14th Foreign Ministers' meeting of the Islamic Conference organisation concluded 12 hours behind schedule, after acrimonious exchanges about a resolution on the Gulf war

Greek official steps down over Cyp[illegible]

Gre[illegible] For[illegible]

WORLD TRADE NEWS

Andrew Fisher sees no solution to one crucial imports question this year

EEC and Canada clash over newsprint

A TOUGH battle is being fought between the EEC and Canada over future levels of newsprint imports into the Community, once Scandinavians have full duty-free access from next year.

Talks between the two sides, with the Canadian newsprint producers watching anxiously from the sidelines, have dragged on for several years, but have so far failed to bring a solution.

EEC countries use more than 4m tonnes of newsprint a year, of which Canada has been providing around 700,000 tonnes duty-free. But EEC proposals now on the table could cut this by over 200,000 tonnes.

The Canadian Government has been arguing its case strenuously and has hinted that retaliation could occur if its EEC markets are cut back to accommodate the Scandinavians, as well as rising EEC newsprint production.

The last talks in Brussels between the two sides, just over a week ago, ended with no agreement. Now, said one official in Ottawa, "we shall have to sit back and wait." Certainly, there will be no solution by the start of 1984.

Newsprint exports to the EEC are worth some $350m (£233m) to the Canadian industry each year. The market is a vital one, because rising capacity in the U.S. has eroded Canadian sales there, other countries are increasingly moving into newsprint production, and Canada itself has also installed new machines.

Canada has nearly 60 per cent of the growing U.S. market, which is expected to total 11m tonnes next year. Canada's own overall production capacity is just over 10m tonnes, slightly less than twice that of its large southern neighbour and customer.

A report by the Forest Industries Advisory Committee of Canada in August admitted that sales in non-U.S. markets would become harder to achieve.

Its share of the world market fell from 40 per cent to 37 per cent in the 1970s, as new capacity was installed elsewhere, notably in the southern U.S.

New exporters such as New Zealand, South Africa, and Australia also came onto the scene. With this and recession, Canadian newsprint shipments fell from 8.9m tonnes in 1981 to 8.1m in 1982 (Canada itself took 935,000 tonnes of this last year against 1m in 1981), giving it a lower 35 per cent world market share.

While the committee thought Canada should at least maintain its share of the U.S. market, it warned: "Shipments to Western Europe, Latin America and Oceania are expected to decline slightly as substantial capacity is being added in those areas."

More than 400,000 tonnes of extra annual capacity will have been installed in the UK alone by the second half of the 1980s, once Canadian and Finnish investments are fully on stream.

EEC capacity is also being expanded in West Germany, where Gebruder Lang is adding 170,000 tonnes. The Swedes and Finns, too, also plan to boost output. But overall demand in the EEC is expected to grow by under 2 per cent a year.

It is against this discouraging background that Canada has been pressing its case. Many European newspaper publishers, especially in the UK which uses about 1.3m tonnes of newsprint a year, want to retain a high level of Canadian imports as a balance to the Scandinavian producers to prevent them dictating prices.

Scandinavia's impending duty-free status stems from the entry by Britain, Ireland and Denmark to the EEC in 1973. The EEC entered into trade agreements with the European Free Trade Association (EFTA), to which they had belonged.

Thus the Scandinavian members of EFTA have had duties on their goods progressively reduced, with those on paper ending on January 1 1984.

Before this, their newsprint sales to the EEC have come under the 1.5m-tonne-a-year quota agreed for non-EEC suppliers. Supplementary quotas have been fixed for needs above this level.

Canada claims it cannot accept any quota less than the 700,000 tonnes it already supplies, with an extra 50,000 tonnes to be allotted for other suppliers.

But the EEC has worked out a draft quota for 1984 of 500,000 tonnes, which would clearly be nowhere enough to satisfy Canada, which also wants scope for growth. It could then appeal to the panel of the General Agreement on Tariffs and Trade (GATT), under which the present 1.5m tonne quota is agreed.

Quota move may save £2m for UK newspapers

By Paul Cheeseright in Brussels

The EEC Council of Ministers today expected formally to approve an additional duty-free import quota for 1983 of 180,000 tonnes of newsprint. The decision will save British newspaper proprietors from possible duty payments of £2m this month.

The existing quota has run out and British newspapers have estimated their needs for the rest of the year at 120,000 tonnes out of a total EEC shortfall of 260,000 tonnes.

The 180,000 tonnes the EEC is expected to approve is a compromise figure put forward by the European Commission. The British share would be 92,000 tonnes.

Italy has help up approval of an additional quota since October, on the grounds that the EEC customers should first purchase Italian stocks of 20,000 tonnes.

At the end of last week, Italy dropped its opposition to the additional quota during talks.

To sell its surplus, Italy needs to find a niche in the market between supplies from Scandinavia that next year have unrestricted access to the EEC and a future quota for Canadian suppliers.

But a further snag for British newsprint users emerged when three other EEC countries started expressing technical reservations about the way the additional quota would be shared out.

India, Russia aim to boost trade 24% next year

BY JOHN ELLIOTT IN NEW DELHI

A TWENTY-FOUR per cent increase in trade between India and the Soviet Union is projected for 1984 above levels achieved this year, according to a new trade protocol signed by the two countries in New Delhi over the weekend.

The target for the two-way trade has been set for next year at $3.84bn (£2.56bn). This is marginally above the $3.6bn target for this year, but substantially above the much smaller total of $3.1bn achieved.

Whether the next target is met depends on willingness of Indian private sector companies to increase their purchases of light engineering and other goods from the Soviets. Government officials insist that the target is based on firm inquiries received in Russia, and India's two main industrial federations are joining up to promote the trade.

Talks are also taking place on capital projects wanted by the Soviet Union, including a 1,000 Mw thermal power station at Kahalgaon which Canadian companies have also been chasing, a nuclear power station in Bihar, and steelworks modernisation.

Neither capital projects nor major defence sales appear as substantial items in the bilateral trade figures because they are based on long-term credit.

But they are seen as a key ingredient of co-operation between the two countries by the Soviet Union which has been losing out in recent years as India has increasingly turned to the West for such purchases.

Indian-Soviet trade relations went through an upheaval earlier this year when Russia reacted to India's failure to meet purchasing targets by cutting back on its own buying of luxury items. This was patched up during talks in Moscow in September.

Exports from India to Russia have been boosted by contracts worth some $300m on commodities and $220m on the extra oil since the Moscow talks in September. But this year's total projected figure of $1.58bn will still be $300m short of the planned $1.88bn.

Next year's target is $2bn to include increased Indian sales of agricultural commodities, engineering goods and leather products.

Russia's sales to India are expected to total $1.6bn this year, only $140m below target. Once various credits and other adjustments have been made, the trade is expected to have been virtually in balance this year.

This means that the Soviet Union successfully stopped India having a favourable balance of trade this year for the first time in five years.

Next year, Russia will be exporting cement and aluminium to India for the first time.

Australia ponders order for Dutch submarines

BY WALTER ELLIS IN AMSTERDAM

THE AUSTRALIAN Government is considering placing an order for the building of two diesel-electric submarines with the Dutch shipyard, RDM.

Mr Gijs van Ardenne, the Dutch Economics Minister, said yesterday on his return from an official visit to Australia that a decision on the vessels would be taken before 1986.

No price has been put on the potential order, but two submarines now being built in the Netherlands for the Taiwanese Navy will cost upwards of $500m (£333m), and costs have risen considerably since that contract was secured, in 1981.

If the deal is confirmed, it will be at the expense primarily of West Germany and the UK. Britain in particular would be upset, since it has long been the major naval supplier to Australia and currently has a new submarine design for which it has high hopes of overseas sales.

While the Australian authorities ponder their position, a high-level delegation of officials and industrialists from the Netherlands has left Amsterdam for Taipei to conduct talks with the Taiwanese Government on possible future orders.

In October, Taiwan announced that it was interested in following up its original submarine order with contracts for a virtual fleet of submarine and surface vessels.

Like its predecessor, the order would be extremely controversial. Peking has already denounced it as yet another Dutch breach of the "one-China" policy.

The delegation wants to clarify the extent of the likely order.

Ireland backs British ventures

BY OUR TRADE STAFF

IRELAND'S INDUSTRIAL development authority has approved grant aid for 28 British ventures in the Irish Republic this year. Collectively worth about £26m, the new investments are expected to create 1,100 jobs.

Rimmerdax, a pharmaceuticals trading company owned by the Kassam family of Uganda, is to manufacture generic drugs for worldwide export. It plans to set up a research and development centre in advance.

A company called Sunseekers Ireland is to make sunroofs for passenger cars in Britain and Continental Europe. The development authority says this is a growth market, worth more than £60m a year.

A joint venture between Bio Isolates of the UK and Mitchelstown Co-operative has set up a company to produce protein concentrate.

Overseas Technical Services group has created a subsidiary to support its training of technical advisers for the oil and gas industry. AGB Research is expanding into data processing.

Also in the computer field, Northern Ireland Business Systems, of Belfast, is investing in microcomputer software for use in accounting, insurance brokerage and export contracting at the National Management Centre in Sandyford, Dublin.

The food group Batchelors is expanding its canning factories in Cabra and Athy.

Daewoo wraps up $570m ship building finance

DAEWOO Shipbuilding Heavy Machinery has completed arranging the financing for the largest shipbuilding job ever in South Korea—a $570m (£380m) contract with U.S. Lines to construct 12 container vessels, **AP-DJ** reports from Seoul.

The company has signed a syndicated loan with a group of commercial banks for $47.5m and said the state-run Korea Development Bank has agreed to provide $66.5m in credits for the projects.

The two loans together represent 20 per cent of the contract price. The Export-Import Bank of Korea earlier agreed to finance 50 per cent of the contract value. U.S. Lines will provide 20 per cent in down-payments and Daewoo will finance the remaining 10 per cent with its own funds.

Anne Charters writes: M Laurent Fabius, the French Minister of Industry and Research, in Seoul to push French participation in major South Korean projects, including nuclear power plants and a high velocity train, indicated that high technology fields were also of special interest.

He cited new opportunities for closer co-operation and technology transfer in telecommunications, satellites, transportation, marine geology and computer - telecommunications networks.

Fluor shares S. Africa nuclear plant contract

SOUTH AFRICA'S electricity supply commission, Escom, has awarded the maintenance services contract for the country's first nuclear power station to Fluor Engineers South Africa, a subsidiary of Fluor Corp. of California, and the French company Franatone, one of the main contractors for construction of the station, AP-DJ reports from Johannesburg.

SHIPPING REPORT

Hopes of market upturn

BY ANDREW FISHER

THE APPROACH of the year-end has brought hopes that 1984 will finally see a sustained upturn in world shipping markets.

Eggar Forrester, the London shipbroking firm, discerned signs of improving demand lately after a largely, though not wholly, disappointing 1983.

"Shipping markets could be on the threshold of an improvement," it said in its latest monthly report. One sign is the steady decline in laid-up tonnage.

Eggar said the volume of laid-up shipping peaked on the bulk carrier side this February and, apart from a small rise in summer, has since fallen by over one-third.

For tankers, the peak was June, with a subsequent 30 per cent drop, though not all of the tonnage released has resumed trading.

The fall in lay-ups suggests that the shipping industry has begun to benefit from the economic recovery under way with some strength in the U.S.

Last week saw no great activity, however, in dry-cargo markets, with Denholm Coates reporting a drop to $8.25 a ton from $8.75 in the grain rate from the U.S. Gulf to Europe. The rate from the U.S. Gulf to Japan barely held $15.

The tanker market was fairly quiet, with a lack of demand for tonnage from the Gulf. No Japanese charterers were in the market and rates fell for all vessel sizes. There were no liftings by large ships from Kharg Island in Iran.

World Economic Indicators

RETAIL PRICES
(1975=100)

	Oct. '83	Sept. '83	Aug. '83	Oct. '82	% change over previous year
U.K.	252.7	251.9	250.6	240.7	5.0
West Germany	141.2	141.2	140.9	137.6	2.6
France	233.9	232.3	230.6	212.1	10.3
Italy	357.0	351.2	346.6	315.1	13.3
Netherlands	158.8	158.2	157.5	155.1	2.4
Belgium	174.9	174.9	173.7	164.3	6.5
U.S.	187.7	187.2	186.3	182.4	2.9
Japan	152.8	151.2	149.3	150.7	1.4

Source: Eurostat

British Telecom's engineers count cost of strike

By David Goodhart, Labour Staff

THE POST Office Engineering Union's campaign of industrial action against the Government's proposed privatisation of state-owned British Telecom ends today as 1,400 members return to work in the London international exchanges.

Only a small minority in the union ever believed that industrial action could itself stop the Government's plans. But a total withdrawal from action will be seen by many inside and outside the union as a significant retreat.

It is straightforward financial necessity that has forced the hurried scaling-down of action. When the 1,100 members at inland BT in central London were on strike at the same time as the international members, the cost to the union in strike pay was over £400,000 a week.

The clear total cost to the union has been about £2.5m. The POEU had total assets before the action of about £4.3m and is not going to go bankrupt. But it already owes other unions over £1m, its bank about £¼m and the BT pension fund about £½m for the members who have been on strike for the last eight weeks.

It was some of these stark facts that persuaded the executive to send the international members back earlier than expected and without getting the status quo agreement that they wanted.

There have been other costs of the industrial action. First, it has undoubtedly alienated a minority of members. Since October 1982, when the union organised its first one-day strike against privatisation, about 5,000 have left the union.

Second, the union's bluff has been called on its industrial muscle. It was widely believed that the international exchanges would virtually collapse after a few weeks of action, but they have been kept going. BT management will also have noted that they have run with less than a third of the usual manning levels.

Many on the centre right – which dominated the union for decades before a broad left victory last June – would argue that the action should have been called off a month ago. But they would also say that "something had to be done" by way of industrial action and point to the success that industrial action has had in highlighting the issue on the union's terms.

Inflation set to fall 'if sterling remains stable'

BY MAX WILKINSON, ECONOMICS CORRESPONDENT

THE TREASURY's prediction that the UK inflation rate will fall rather than rise next year could prove correct, says a leading independent forecasting organisation today.

The London Business School Centre for Economic Forecasting (LBS) which itself predicted a modestly rising inflation rate, concedes that the outlook is likely to be brighter if the exchange rate remains stable.

However, in a commentary on the Treasury's autumn forecast, the LBS says that it believes the Treasury's prediction of a 3 per cent economic growth rate next year is over-optimistic.

The commentary follows a series of analyses using the LBS computer model of the ec onomy to test the assumptions behind the different forecasts.

This year, the Treasury is significantly more optimistic about the prospects for inflation and growth in 1984 than the consensus of outside forecasters.

Even small differences in the expected rates of growth and inflation could change the balance in the next budget from tax increases to tax cuts or vice-versa.

The LBS identifies the Treasury's assumption of stable oil prices and an unchanged exchange rate as crucial to its forecast that inflation will fall to an annual rate of 4½ per cent by next autumn.

The centre's own forecast of an inflation rate of 5½ per cent by that time is based on the view that the value of sterling will drift downwards. However, it agrees with the Treasury that the lower figure might be achieved if sterling remains firm. It also points out that the difference between the two forecasts for inflation is well within the margin of error for either prediction.

It sees a "genuine difference of view" about the prospects for the growth in output, with the Treasury projecting a rise of 3 per cent next year against the LBS forecast of a little over 2 per cent.

Even using the Treasury's somewhat different assumptions, the LBS can only raise its forecast to a growth rate of 2½ per cent.

It says the main reasons for the Treasury's higher figure are:

- The view that private consumption will grow by 2½ per cent, a rather faster rate than the LBS thinks is likely.
- A somewhat optimistic view of the growth of exports as the world economy recovers.
- The view that lower inflation will boost the real value of government spending.

The centre also discusses whether special sales of state assets should be considered as reducing the public sector borrowing requirement, as at present, or whether they should be considered as a method financing borrowing.

It concludes: "The risk that the Government faces under present arrangements is that a successful privatisation programme could lead to inflationary overheating, since the resulting asset sales will enable the authorities to increase the direct claims of the public sector on resources while remaining within their PSBR guidelines."

Merchant banks aim to change EEC limit

By David Lascelles

BRITAIN's merchant banks are preparing to lobby for changes in a proposed EEC directive on bank accounting which they fear could force them to reduce their hidden reserves.

The directive, which is shortly to go before the Council of Ministers in Brussels, will allow banks to keep hidden reserves equal to 5 per cent of their assets. The definition of assets, however, is so narrow that it excludes many items on a typical merchant bank's balance sheet.

Mr Robin Hutton, secretary of the Accepting Houses Committee, said: "We do not see why anyone should object to what part of a bank's assets are covered by the definition."

The committee will put its case for a more relaxed definition to the Bank of England and the Department of Trade.

As drafted, the directive defines assets as loans and advances, the main items on the balance sheets of commercial banks. However, merchant banks, which are more entrepreneurial by nature, tend to have a large part of their assets in such things as gold, commodities, Eurobonds and contingent liabilities.

If these do not count, the qualifying portion of their assets will be so small that many banks' reserves would exceed the 5 per cent limit and would have to be reduced. With the broader definition, though, hidden reserves would be acceptable.

The merchant banks' objections are a new twist to the debate about hidden reserves that has continued in the EEC for more than a year.

Regional policy to be made more flexible

BY ANTHONY MORETON, REGIONAL AFFAIRS EDITOR

THE GOVERNMENT'S long-awaited White Paper statement of intent on regional policy, considered to be one of the most important reviews of the system since 1945, will be published this week.

It will take as its central point the need to introduce more selectivity and flexibility into the system in place of the block grants given automatically to certain areas.

This lack of flexibility has been particularly criticised in the West Midlands, where unemployment levels have risen to heights usually associated with blackspots such as Tyneside and Clydeside.

The Government will also announce that it is to honour its pledge to the European Commission to phase out by the end of 1984 mandatory grants towards spending on replacement plant and machinery.

The fact that the Government will remain committed to regional policy is due largely to a strong fight in the Cabinet by Mr Nicholas Edwards, Secretary of State for Wales, and Mr George Younger, Scottish Secretary.

Most Conservative MPs are less enthusiastic. The party policy statement for the June general election referred to regional policy in just one sentence, confirming that the Conservatives would "continue to maintain an effective regional policy."

Even that sentence was strongly opposed by some sections of the party.

BBC expected to delay satellite TV

By Raymond Snoddy

THE BBC is close to deciding that it cannot go ahead with its direct broadcast by satellite (DBS) service in 1986 as planned. The board of governors will take the final decision on Thursday.

A series of forecasts has shown that receiving equipment is unlikely to be available on time or at a cost low enough to attract a commercially viable audience.

The Government still has not announced technical standards for the receiving equipment. It has delayed these in the increasingly forlorn hope that it can win the backing of the French and West German Governments to establish the system it favours – C-MAC with digital sound – as a full European standard.

BNFL expects public criticism

By David Fishlock

BRITISH Nuclear Fuels (BNFL), which is state-owned, expects to be publicly criticised by the Government this week for contaminating 25 miles of Cumbrian coast in north-west England with radioactivity.

The radioactivity, as much as 1,000 times natural background levels, although still very slight, was released during annual maintenance operations on BNFL's Sellafield factory.

BNFL refused to comment yesterday on press reports that an inquiry by the Nuclear Installations Inspectorate was highly critical of Sellafield management.

Britain plans satellite station

BY PETER MARSH

MINISTERS are likely to approve over the next few months Britain's first satellite station that can receive pictures of the earth from space.

The £10m station, which will probably be in Scotland, will tune into signals from Western Europe's first remote-sensing satellite, ERS-1, which is due to enter orbit later in the 1980s.

The Government is also considering whether to set up a receiving aerial in the Antarctic to obtain pictures from the same satellite.

At present, people in Britain who want satellite pictures of the earth must obtain them from other countries, which leads to delays.

Data from remote-sensing satellites, such as the U.S.'s Landsat series, can locate mineral deposits or help farmers to monitor the growth of crops.

Government officials, however, are reluctant to continue with the current arrangements when Western Europe's own satellite is launched in 1988. With a new technique, the satellite will scan the oceans with radar to provide a representation of, for example, wave heights or wind speeds.

With the data, civil servants say, shipping will obtain better weather forecasts. The information could be useful to companies which operate oil rigs and to scientists. If Britain has its own station, UK companies or research organisations could be directly linked to it.

The £200m ERS-1 satellite is being built by the 11-nation European Space Agency, which operates receiving aerials in Kiruna, Sweden, and Fucino, Italy.

People in Britain receive data from these stations under arrangements co-ordinated by the UK's Remote Sensing Centre at the Royal Aircraft Establishment.

PLIGHT OF UNEMPLOYED REMAINS BLEAK

How life has improved for office workers

Robin Pauley looks at the annual analysis of social trends and change in the UK, in a decade that has witnessed deep recession

THE MATERIAL quality of life continues to get better for Britain's office workers and is about stable for manual workers. The lot of the unemployed, however, remains bleak and impoverished, according to the latest edition of Social Trends.

The book is an annual compilation by the Central Statistical Office of the gradually changing pattern of Britain's social and economic life.

The current edition gives the picture from the early 1970s to the end of 1982 and illustrates the impact of the recession, which was at its worst during spring of 1981.

In April 1982 the average earnings for all full-time male employees were £150.50 – manual employees earning an average £130.50 and non-manual workers £175. The average gross weekly earnings of all female employees at that time was £99, 8 per cent higher than in 1981.

In real disposable earnings the gap between manual and non-manual workers has been widening, manuals experiencing a slight decline and non-manuals an increase, although tax and inflation have gobbled up virtually all the nominal increase in gross earnings since 1975.

Gross weekly earnings rose sharply between 1975 and 1982 for all workers, although there was a drop in real disposable earnings for most workers between 1975 and 1977 and again between 1979 and 1982.

Between 1975 and 1982 the gross weekly wages of manual workers at the upper and lower quartiles of earnings increased by 150 and 148 per cent respectively, but in 1982 real disposable earnings were 1 per cent down on 1975 at the upper quartile and 3 per cent down at the lower quartile, well below the levels reached in 1979.

For non-manual workers at the upper and lower quartiles gross weekly earnings increased by 171 and 175 per cent between 1975 and 1982. In 1982 real disposable earnings were 6 per cent above their 1975 levels.

The wealthiest 1 per cent of the population owned 23 per cent of all marketable wealth in 1981, compared with 31 per cent in 1971. If occupational and state pension rights are counted into wealth the richest 1 per cent of the population own 12 per cent of wealth and the richest 50 per cent own around 80 per cent.

Spending on escapism soared in the past decade. Real consumer spending, allowing for inflation, in the UK increased by 14 per cent overall between 1972 and 1982. Real spending abroad, however, rose by 80 per cent and real spending on television sets and video recorders increased by 133 per cent.

British residents took 47m holidays in 1982, compared with 41m in 1971, and within these figures holidays abroad rose from 7m to 14m.

Britain's population in 1982 numbered 56m, about 500,000 more than in 1971. By the end of the century there will be 750,000 more people aged 75 or over.

Dietary habits have changed, slowly but steadily since the 1960s. Liquid milk, eggs, beef, veal, mutton and lamb are becoming less popular. Poultry and fish have gained in popularity and margarine has gained at butter's expense. More is being spent on alcohol and less on tobacco.

Last year 95 per cent of households had a vacuum cleaner and 93 per cent had a refrigerator, 51 per cent owned a freezer compared with 32 per cent in 1978, and 60 per cent had central heating compared with 52 per cent in 1978 and 39 per cent in 1973.

Nearly all households in 1982 had a television set, 77 per cent having a colour set and 20 per cent a black and white. About three quarters of households had a telephone, compared with 45 per cent in 1973.

About 2m of Britain's 18m homes in 1981 however, were defective, lacking basic amenities or needing substantial repair. About 1m were unfit for human habitation – a figure which remained almost constant between 1971 and 1981.

There were still 3 per cent of households without the sole use of a bath or shower in 1982, a substantial improvement on the 12 per cent of 1971. The number of homeless households in Britain also continues to rise, up from 33,170 in 1980 to 35,700 in 1982.

There were nearly 1m more people of pensionable age in 1981 than in 1971, and 500,000 more of them were living alone.

The rise in the elderly population may not pose the public spending crisis in coming decades that is often supposed. Projections show reductions in the dependent school age population which would ease the pressure – with the number of pupils aged five or over expected to fall by more than 1m to about 8m by 1991.

More men than women die every year, balanced by the births of more boys than girls. There are twice as many women over 75 as men – partly because of the impact of the Second World War on the male population.

In 1982 the birth rate was 12.6 per thousand, well down on the 1964 baby boom peak of 18.7, but up on the 1977 rate of 11.6.

People continue to marry later – at a median age of 26 in 1981, compared with 24 in 1971, and women at a median age of 23 in 1982, compared with 22. Almost three in five teenage grooms eventually divorce.

The number of illegitimate births continues to rise, accounting for 14 per cent of all live births in England and Wales in 1982, compared with 6 per cent in 1961. For mothers under 20 there were more illegitimate births (29,000) than legitimate (27,000) in 1982.

Abortion is also rising, with 43 per cent of all extra-marital conceptions ending in abortion in 1981, compared with 26 per cent in 1971. There were 128,000 abortions in 1982, close to the 1980 and 1981 levels but 35 per cent up on the 1971 figure.

The British are also enjoying better health. A boy born in 1979 can expect to live to over 70, compared with 68.8 if he was born in 1971. Girls can expect to live to 76.2, compared with 75 if they were born in 1971.

The 1982 whooping cough epidemic turned out to be every bit as serious as those in 1978 and 1957, with about 71,000 cases. The worldwide epidemic of sexually transmitted diseases continues to affect Britain as much as other European countries, with 500,000 new cases in 1982 seen at clinics, 8 per cent more than in 1981.

More than 3m criminal offences were recorded by police in England and Wales in 1982, more than in any previous year and 10 per cent more than in 1981. The clear-up rate is down from 45 per cent in 1971 to 38 per cent in 1981 and 37 per cent in 1982, although the UK police forces increased 26 per cent between 1971 and 1982.

Social Trends 14, HM Stationery Office, £19.95

THE MANAGEMENT PAGE

EDITED BY CHRISTOPHER LORENZ

Corporate consulting

Why 'strategy boutiques' are changing tack

BY DEAN BERRY AND CHRISTOPHER LORENZ

NEVER IN the glamorous and high-priced world of strategy consulting has there been a revolution quite like it. Just two years ago the Boston Consulting Group, Bain Braxton and the other leading "strategy boutiques," as they are now known in the trade, were still focussing the attention of potential clients on their staple menu of "scientific" analyses and matrices as *the key to better corporate* strategy.

Now most consultants are preaching the much more ambitious gospel of "corporate culture." Belatedly reacting to their clients' need for more flexible and effective means of grappling with today's rapidly changing business environment, they are talking about ways of matching a company's strategy to its culture, or, even more ambitiously and controversially, of helping a firm to change its *culture to suit its strategy.*

"In Search of Excellence"* the much publicised million-plus seller which lays so much emphasis on corporate values and "keeping things simple" is only the tip of this growing cultural iceberg. McKinsey, the same consultancy which produced that book's authors, Tom Peters and Bob Waterman, has also spawned one of the writers of another current U.S. best-seller "Corporate Cultures."**

To be fair to McKinsey, which *has long dealt in various* unlabelled aspects of cultural change, such as organisational design and implementation (as opposed to strategy analysis and formulation), it actually seems rather embarrassed by the success of the two books, and is approaching the new fashion of "culture consulting" with caution.

But it comes as quite a shock to find a specialised "strategy boutique" saying, in the words of BCG's latest "Annual Perspective," that "We believe the key has shifted from *having* a strategy to being able to *change* a strategy."

And again, "It is an inescapable fact that the shared values, beliefs and behaviour of a company—its culture—change only slowly. How does one actually change behaviour in a corporation when all the unwritten rules may work to keep it the same?"

However self-evident such truths may appear, they depart fundamentally from the domi*nant consulting patterns of the* last two decades.

In the 1960s, in a period of economic and business growth through acquisitions as well as internally generated investment, the problems were of adjustment, control and planning. Top consultancies, led by McKinsey, focused on questions to do with internal management, such as divisionalisation, profit centre budgeting, and organisational issues.

In almost complete contrast, by the time BCG really got going in the late 1960s and 1970s (growing dramatically right through three recessions), the critical strategic issues were largely to do with businesses or markets—external problems, in other words. "Business consulting," as distinct from management consulting, was born.

A necessary pre-condition of this shift in focus (also reflected in what was taught at "advanced" business schools) was the development and spread of rational analyses (quantitative if at all possible) of business and management problems. A key symbol, and a direct influence on the techniques involved, was the way Robert McNamara had run the U.S. Department of Defence in the early and mid-1960s with numerical data, computer models, "counts" and "ratios." He even looked rational, with his hair parted down the middle, and his precise, steel-rimmed spectacles.

Change in emphasis

So the climate was right for a significant change in consultancy emphasis:

● With the onset of a series of recessions and more global competition, companies had—more than ever before—to get the market right;

● Complex, rational analysis had become the dominant theme in leading businesses, notably U.S. General Electric, as well as in consulting and business schools;

● Analytically skilled business school graduates were finding their way into consulting and into powerful corporate staff positions.

But the trend still needed an explicit formulation, expression and legitimisation. This occurred when BCG launched a way to classify and label the strategic performance of operating units, with explicit tools for analysing their performance (The Experience Curve and Growth/Share Matrices), plus the associated concept of "business portfolios."

The power of this kind of rational analysis, geared to the market and especially to competitive practice, seemed attuned to the strategic issues of the day and to the inclinations of forward-looking managements and governments. The formulation of it gained rapid and wide acceptance, first in North America, and more recently in Europe. Even the British and Swedish governments became clients.

The impact of BCG's tools and concepts on business schools was equally dramatic. Business policy, a subject area which had been almost wholly taught by the Harvard "case method," came to be seen as more *critically* important and academically valid. The professors anointed themselves teachers of "strategy"—it is always better to feel at the centre of a movement and part of its mystique than be trailing along in its wake.

In consulting, what followed was the natural process of gene-splitting and cloning that marks professional organisations. A series of new firms such as Bain, Braxton and Marakon Associates — the "strategy boutiques"—was created. Like BCG, they grew extremely rapidly, each with its variation on a theme of an analytical crystal ball.

Among the "products" they used or created to sell business—"for client development" in the euphemism of the trade—were: PIMS (Profit Impact of Market Strategy), a massive database of business characteristics and performance; nine-cell matrix screens of industry attractiveness; shareholder value analysis; and the ubiquitus "strategic business unit" (SBU).

For the new, analysis-orientated strategic consulting firm, the business "development" process went as follows:

1. Hire the brightest and best of the MBA graduates and pay them extremely high salaries. Make sure the salary levels get leaked to the press, to graduates and also to corporate recruiters, so that the information gets circulated widely among prospective clients.

2. Develop a semi-proprietary analytical "product," make sure that it gets linked with a believable success story, and then advertise the product's power (this may mean writing a book or carefully placing a magazine article, since true professionals don't advertise.

3. Aggressively price the product up-market.

What an unbeatable formula! Bright talented people using powerful tools for the fortunate few who can pay for competitive advantage!

That business concept worked extremely well for consultants; at least until a thoroughly deep recession on a global scale in the late 1970s and early 1980s changed many of the rules of the world business game—or, rather, underlined the fact that the rules had never been as simple as implied by this sort of strategy consulting.

The 1970s hype of consulting analysis and technique went to extremes; at one point it was even claimed that the PIMS database proved that the observed relationship between market share and profitability was actually cause and effect. And the whole approach suffered from being over-directed to the choice of products and markets, and to making the investment decisions to support these market positions.

Narrow view inadequate

Fortunately, a growing body of consultancy clients (or potential clients) considers such a narrow view to be inadequate. Some have found that 1970s-style strategy consulting did not deliver the promised benefits. Others never shared such an inflated faith in the miracle-working power of product/market analysis. Above all, perhaps, most top executives are becoming painfully aware that the pace and complexity of environmental change now require them to develop much greater abilities of adjustment, in organisational as well as strategic terms. They are frequently all too aware of the intransigence of their corporate cultures.

On their own, these factors constitute sufficient reason for the leading consulting firms to *reposition themselves for the* 1980s. But two further reasons could underlie their rapid shift towards a preoccupation with corporate culture.

First is the consulting world's need to fill a gap (actual or potential) in continuity and revenues. Quite a number of chief executives are abandoning the very long-term engagement of teams of consultants in favour of short, periodic contracts. Radically slimmed businesses need to get on with it *and are politically sensitive* to consultants who stay too long. Culture consulting, by contrast, must be carried out over pretty lengthy assignments (almost by definition) if it is to have any effect.

The second point is simply one of fashion. Because of the intangibility of their service, many consultancies feel they have to sell easily identifiable products or packages, rather than the vaguer but potentially more valuable competence of handling all sorts of problems and opportunities in the round and in depth.

Such "products" in consulting can be a trap in themselves whether they are about strategic analysis, culture or anything else. Yet even Management Analysis Centre, which has a better track record than most consultancies in effecting cultural change, has produced a new "checklist" called "the CEO's Change Agenda."

The strategy boutiques seem to be following suit either by *creating their own culture* "products" in a bid to capitalise on the fashion, or by implying in more general terms a competence in management and culture as well as in analysis. They are right to link culture management with market analysis. Good consulting needs both. But can they deliver?

**In search of excellence, by Thomas Peters and Robert Waterman. Harper and Row, £12.50.*

***Corporate cultures, by Deal and Kennedy. Addison-Wesley, £12.70.*

Dean Berry is chairman of the Centre for Business Strategy at the London Business School. He was previously Dean of Insead, and taught at Harvard and Yale. He is also an independent consultant.

A further article, on the dangers of culture consulting, will appear on Wednesday's Management Page.

Overcoming recession

Risk taking is back in fashion

BY TIM DICKSON

RISK taking has been pushed into the back seat in recent years as major companies have struggled merely to survive. But a survey of current attitudes in 10 countries suggests that the tide may now have turned.

Regardless of how robust the economic recovery proves to be a large percentage of nearly 400 European, Asian and South American executives surveyed expressed confidence that their companies' willingness to engage in ventures "of a risk nature" will increase substantially over the next five years.

While the survey, in the latest issue of International Management, reflects an increased appetite in large companies for business risk, it is significant that the change in attitude was even more evident in privately owned manufacturing, service and sales firms employing less than 500 people — a category which comprised two-thirds of the respondents.

The swing in attitudes was established by asking executives to rate on a five-point scale their company's risk-taking profile over the previous five years and to contrast that with what they thought it would be over the next five (see below).

More than 40 per cent thought their companies would be "much more willing" or "a little more willing" to take risks in future, compared with 27 per cent over the last five years. Britons and Australasians have recorded the biggest shifts in opinion, with Singaporean, German and Dutch executives also slightly more hopeful than average about their companies' willingness to embark on new projects. Brazilians and the French appeared to be the most gloomy, with Brazilians thinking companies entirely shunning risk over the next five years would almost double to 30 per cent.

While some of the gloom seems to have lifted, caution is still the keynote among those interviewed. The number "much more willing" to take risks was only higher in Italy and Singapore. Responses from some of the others showed in percentage terms that up to half were less positively disposed towards risk than in the past five years.

Asked about the most important ingredient for active risk taking, most respondents put availability of capital at the top. Higher rewards came second overall with buoyant markets and more competent management the next most significant factors. Surprisingly, perhaps, relaxed financial controls came bottom of this poll, with Japanese managers the only ones seemingly constrained by their accountants.

Why did companies lose their spirit of adventure? Depressed markets was the unanimous answer, followed by lack of capital and insufficient personal rewards.

Oddly enough the penalties for failure weigh heavily only on the minds of British and Singaporean managers, with Germans apparently the most intrepid.

CORPORATE ATTITUDES TO RISK TAKING OVER THE NEXT FIVE YEARS

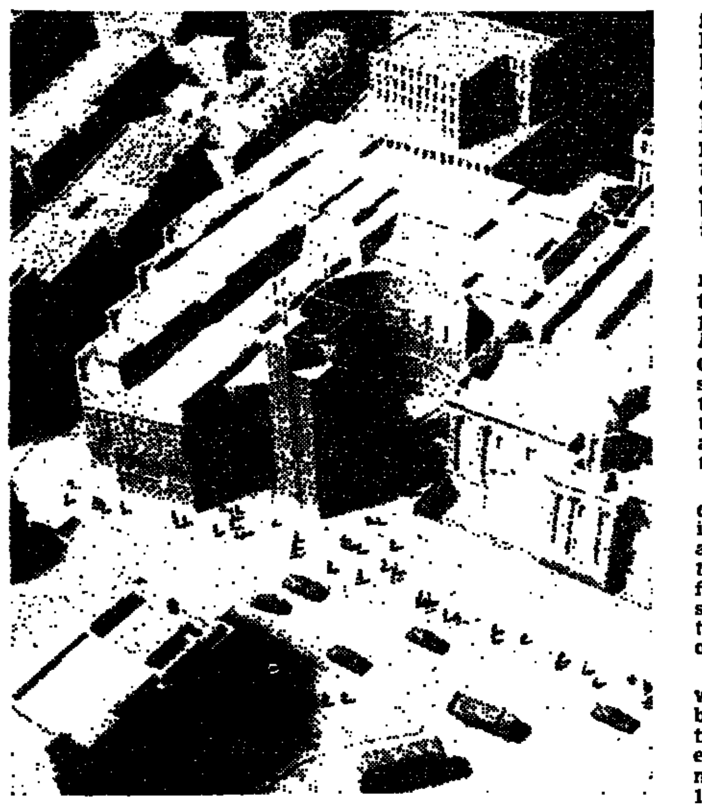
Attitude	France	Germany	Netherlands	Japan	Italy	Britain	Singapore	Brazil	Australia New Zealand	Average
	%	%	%	%	%	%	%	%	%	%
Not willing to take risks	18.6	1.9	6.8	15.9	8.8	2.2	9.1	29.4	6.5	9.6
A little willing to take risks	16.9	9.6	17.8	25.0	18.2	17.1	13.6	17.6	19.4	17.2
About the same as now	30.6	38.6	27.4	18.2	28.5	27.7	31.8	11.8	25.7	26.0
A little more willing	25.4	34.6	32.8	27.3	25.0	31.7	27.3	17.6	35.8	29.6
Much more willing	6.8	11.5	11.0	9.1	11.4	19.2	18.2	11.8	9.7	11.8
No response	1.7	3.6	4.1	4.5	9.1	2.1	–	11.8	3.2	4.1

THE ARTS

Architecture

Colin Amery

Art and commerce



Nelson's eye view of the new proposals for the National Gallery

Last week the positively final version of the new design for the extension to the National Gallery was announced by Lord Annan, chairman of the trustees, and the developer Mr Nigel Broackes of Trafalgar House. It is a year since the architects Ahrends, Burton and Koralek and the developer won the competition and in that 12 months many changes have been made to the *original design.*

The principles remain—that the developer will provide the National with the new top-lit gallery space for the Early Renaissance collection and this will be financed and supported by offices leased to the developer for 125 years at a nominal rent. Lord Annan feels certain that this is the only way a gallery will actually be built in spite of the fact that the Government owns the site, and has earmarked it for the National since the war. There may well be reservations about the divisions of the valuable space between art and commerce and future generations will wonder why the Government could not afford to build its own building on its own site.

The anticipated cost of the extension is £18m—about one-sixth of the cost of one of the latest frigates ordered by the Government. For this sum the developer will acquire 51,000 square feet of offices (it has been suggested that the rental value is in the region of £1m per annum), and the gallery aproximately 35,000 square feet of space. As the developer plans to make this office building his own headquarters this is in estate agents' language a "high quality pre-let" and is likely to give the developer and his backers a good 5 per cent development yield — an attractive prospect for any institutional investor. As a result of this arrangement the nation gains some new rooms for some of the finest paintings in the world and the developers secure an important blue chip investment.

The question that exercises me, and anyone who has seen the latest models of the scheme, is what has happened to the architecture? When Ahrends, Burton and Koralek displayed their winning proposals there was an element of classical, almost Roman drama about their galleries. Curved ambulatory space and an almost vaulted roof gave this scheme a sense of architectural timelessness that suited the paintings and the whole atmosphere of the gallery.

The latest proposals have lost much of the architectural drama. This is presumably because since the competition the brief has been considerably amplified. The trustees requested an increase in the provision of gallery space. They also suggested that in the rooms they wanted to see "a sense of immutable character, of formality and balance and a rectilinear layout with a degree of ceremony." This must have meant an almost complete redesign. During the last year the gallery staff prepared an "ideal hang." It is the relationship between the groups of paintings that has now, quite rightly, decided the shapes of the rooms. It seems a much more sensible plan for a permanent collection to abandon the pointless idea of flexibility. Too often flexibility means simply not knowing what is needed.

There are 17 *new exhibition* rooms — all air-conditioned and top-lit. Paintings like *The Arnolfini Marriage*, *The Rout of San Romano* and Piero della Francesca's *Baptism* will occupy the setting. The trustees are particularly glad that for the first time paintings from both north and south Europe can be shown together.

It is probably early days to consider the finishes for the interior of the galleries but the architects have proposed "*plaster walls with a painted fabric finish.*" Floors will be polished stone. Anything would be better than the soiled carpets of some of the present Italian Rooms.

It is the outside of the new wing that leaves a great deal to be desired. Flat roofs replace the twin barrel vaults of the early design and the most noticeable addition is the new 100 ft glazed stair tower. At the top of the tower will be a coffee shop and good views of Trafalgar Square. It is the tower with its masts and curious stepped profile that is the silliest change to the original plan. The architects have explained that a vertical feature was needed to balance the tower of St Martin's but this design is both inelegant and pointless. One can only cynically hope that it has been put in so that the planners will feel that there is something that they can legitimately insist on removing. What is particularly odd about this new design is that it bears so little relation to the one "prefered" by the public that it almost amounts to a dismissal of the public's views.

This final proposal is patently an attempt to redesign the whole project without quite losing all the qualities of the first scheme. In many ways it would have been less of a compromise to start the whole thing again. The "new" design is without the confidence of the first exercise and the most obvious new element, the tower, looks like a major misjudgement.

The full proposals will be exhibited to the public at the National Gallery in February after they have been considered by Westminster Council.

Turning Over/Bush Theatre

Michael Coveney

Four years ago Brian Thompson had a play called *Tishoo* performed in the West End. It was not a success: I seem to recall that Alec McGowen was emotionally torn between Penelope Wilton and a cage full of rabbits. Since then Mr Thompson has visited India and has made a television programme about a great railway there.

In *Turning Over* at the Bush Theatre, which has one of the funniest first acts of the year, we see a television film about life on an Indian hill station being shot on location and, on the other side of the stage, being edited in Acton. A writer of children's books, Martin has chosen India for his contribution to a series cursed with the generic title of "I could be happy here." The director, Frank, wants a film of the right length, with lots of smoke and sunset, and a divorce. He also resents Martin who is inexperienced in television and went to the same grammar school where he won prizes.

This running feud, played out with brilliant precision and smouldering bad temper by Gary Waldhorn as Martin and the brutally incisive Charles Dance as Frank, switches from Sue Plummer's clever Indian evocation of rush matting and temple doorways silhouetted on a matchwood background, to the studio where Frank is disconsolately running the film through with his uninterested editor (David Sibley).

The business of making the film is a chief source of comedy, with the lugubriously unruffled soundman (Peter Jonfield) delivering scathingly understated criticism as he fixes Martin's microphone, and the characters speeding up like the Keystone Cops as the editor in London messes around with his switches. Also implicated are an innocuously overweening Indian travel operator, Mehta (Nadim Sawalha), a bored expatriate housewife, Sally (Geraldine James), and an innocently impulsive PA, Penny (Frances Barber).

The play undergoes a deliberate shift of tension in the second act with a consequent diffusion of comic energy. This is because Mr Thompson chooses to follow through each character's notions of happiness by complicating their emotional involvements. These scenes are very well written, but our expectations aroused by the first act delirium are unceremoniously dashed.

Still, David Hayman's production does not miss a trick of inflection or subtlety and the idea of injured people wooed by the chimera of "finding themselves" in the sub-continent is beautifully conveyed. Mehta and Penny spend a night together with disastrous consequences for both of them. Martin and Sally edge tentatively towards an affair that neither is really prepared to follow through. Frank behaves abominably while bustling the film along in order to get home as soon as possible.

As a small-scale complement to David Hare's *A Map of the World*, this is a decent, thought-provoking and often funny evening, impeccably lit by Gerry Jenkinson, and a fine conclusion to another excellent year at the Bush Theatre.

Gary Waldhorn, Geraldine James, Peter Jonfield, Frances Barber and Charles Dance

Nash Ensemble/Wigmore Hall

Andrew Clements

The Nash Ensemble's French/Czech series at the Wigmore Hall swung back to Eastern Europe on Saturday. But between the Suk, Dvorak, Martinu, and Smetana, the group found space for the first performance of a short vocal piece by John Buller. *Sonnet* is exactly what its title suggests, a five-minute setting for soprano, flute and string quartet of Shakespeare's 23rd sonnet, "Weary with toil, I haste to my bed."

As Buller's programme note acknowledged, matching Shapespeare to music can be tautologous. His simple accompaniment reflects this awareness: an image of night and dreams carefully assembled in shifting, sliding string chords, occasional flute flurries, and a vocal line that moves in simple curves with little ornamentation and graceful intervals. Not a major work, by any means, but a superbly effective miniature evidently relished by Felicity Palmer.

Miss Palmer also contributed two sets of Slavonic songs, the Gipsy Songs of Dvorak and Smetana's Night Songs, declaimed rather stridently, though with careful enunciation. The Nash players enjoyed themselves in Martinu's Sextet for flute, oboe, clarinet, two bassoons, and piano; at least, one hopes they did, for there seems little point in programming Martinu's chamber music, except that it is fun to play. I keep trying with the music of this composer—when being serious it sounds like uninspired Hindemith, when high-spirited it mimics trivial Milhaud. Suk's Elegy for piano trio was also new to me; some civilised mooning shaped into a neat bipartite scheme, quite without individuality, or more than passing instrumental interest.

Book Review

Nigel Andrews

James Cagney: The Authorised Biography by Doug Warren, with James Cagney (Robson Books, £8.95, 232 pages)
Merle by Charles Higham and Roy Moseley (New English Library, £8.95, 220 pages)
Ingrid Bergman by John Russell Taylor (Elm Tree Books, £9.95, 128 pages)

James Cagney: The Authorised Biography by Doug Warren (with Cagney) gives us the respectful yin to the yang of the speculative biography. If unauthorised biographies are often hopelessly untrustworthy authorised biographies are often hopelessly dull. "Just a job," Cagney keeps saying, when asked to comment on one of his past movies, "No stress, no strain." Those who watched Michael Parkinson trying to squeeze blood from a stone when he interviewed Cagney on BBC TV three years ago will know what Warren must have experienced. The book is a long haul for all but the devoted, leavened only by Cagney's sprightly comeback when asked if he ever actually spoke his most famous catch-phrase. "No, I never said, 'You dirty rat.' I said 'Judy, Judy, Judy'" (Cary Grant's own legendary catch-phrase).

At least with Cagney there are the films. But who would wish to sit through a season of Merle Oberon movies? The glacial goddess, in whatever film she appeared in, always reminded me of someone opening a fete. Biographers Charles Higham and Roy Moseley say she revealed "striking talents" in *Wuthering Heights*. Not to me she didn't.

The odd thing about *Merle*, however, is that it is hugely enjoyable. If we are to have hokum, let us have hokum of this class. "Travel, the story-teller says, back over 80 years, across the Indian Ocean, through waves shining like fire opals in the moon, and dolphins, flying fish and water snakes gambolling under the sun . . . ." Thus begins chapter 1, and from that point on the writers never look back except in amber. There are moments when Merle is marvellous and moments when she's a monster (especially if let off her leash anywhere near Marlene Dietrich), but she's always readable and usually resplendent.

John Russell Taylor's *Ingrid Bergman*, alas, is disappointing: little more than a glossy and expanded publicist's biography, written with Taylor's usual insouciance and wry, fleet prose, but with far less commitment than he brought to his book on Hitchcock. You come out humming the photographs, which are well-scattered and handsome.

Canso Trobar/Sadler's Wells

Clement Crisp

Saint-Saëns, gazing at us from a Douanier Rousseau jungle in the enchanting décor for *Carnival;* Geoffrey Burgon, setting biblical texts; realisations — very skilled by Martin Best and Barrington Pheloung — of Provençal songs, are the musical matter of London Contemporary Dance Theatre's latest programme. The range of inspiration is typical of the company's willingness to venture wide, and this final selection of works in their winter season is very well balanced. The Saint-Saëns *Carnival* is Siobhan Davies' ingeniously attractive staging made last year for Second Stride. It is excellently done by LCDT's artists and musicians, and it marks the return of Philippe Giraudeau as guests for two numbers which he unforgettably created. As the timid lover, whose automatic and unavailing gesture, hand to heart, matches the cuckoo's call, he is all pathos, a tragic Stan Laurel; as the swan, he incarnates both bird and 'cellist. In both he demonstrates an artistry unique in its precision and controlled emotional force: greatness may seem an extravagant word to describe his brief interpretations, but how else to qualify a performance so sure and so potent?

Provençal songs are the text for Christopher Bannerman's new *Canso Trobar*, which explores both jovial pipings and drummings (on instruments of the period) and the more seriously sensual attitudes of courtly love. The dances are in the main buoyant, but there are duets which suggest passionate meetings, and one ideally restrained section, for Anca Frankenhaeuser and Patrick Harding-Irmer, that touchingly conveys the poet's reverent adoration of his lady.

Robert Cohan's *Songs Lamentation and Praises*, which completes the evening, uses the extraordinary sonorities of Geoffrey Burgon's settings of sacred texts to sustain an exceptional display of emotion, the dancers impelled in racing sweeps of movement.

The International Webern Cycle at Barbican Hall

Though Webern used strings in many chamber pieces, he composed just three works for the standard string quartet, and the String Trio op. 20. In the continuing Olivetti International Webern Cycle the other ensemble pieces have gone mostly to the Ensemble InterContemporain under Pierre Boulez; but the pure string music was saved for the superb LaSalle Quartet, who played it all on Friday along with early Berg and late Zemlinsky.

Berg's op 3 Quartet was an apt choice — written between Webern's Five Movements, op 5 and the Six Bagatelles, op 9 — and an easy one for the LaSalle, who measured its degrees of crepitating passion with their customary extreme finesse. Under their bows the incessant surgings and ebbings of the score seemed as natural as breathing. Zemlinsky's Quartet no 4 was composed in 1936, two years before the Quartet of Webern; interesting in its own right, it also concludes Zemlinsky's series of quartets, spaced out over several decades, with a typically not-quite-conclusive air. Zemlinsky's irony is prominent, more cheerful than usual amid some Bartokian ideas and honest neo-classicism. It sounds somehow more marginal than the earlier quartets, more like a good professional product than nervy original testimony.

Zemlinsky's sharply imagined colours were realised precisely by the LaSalle team, whose own collective timbre is haunting and faintly husky, and wonderfully adaptable to the extreme hues required by Berg and Webern. The latter's Five Movements had all the delicate virtues one admired when the LaSalle last played them here, and the crunch of absolute conviction too. The still briefer Five Bagatelles were ethereally poised and magical. Those are Expressionist pieces; the much later Trio and Quartet are 12-note constructions in Webern's individual stripped-down style, musical geometry in which performers must find the essential lyrical life. That the LaSalle did — their subtle, faithful rubato in this music is without peer.

DAVID MURRAY

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Webern heard Schoenberg's *Pierrot Lunaire* at its premiere in the autumn of 1912. It made an overwhelming impression: Webern became obsessed with the thought of finding some escape from what he called the "wasteland" of his own existence into the lofty spiritual dimension which Schoenberg's new work represented. For five years, weighed down by sickness and depression (and a short, bizarre spell in the army), he wrote very little—continuing the series of tiny orchestral fragments from which he was later to draw his Five Pieces op. 10, and finishing only the tiny, definitively microcosmic Three Cello Pieces op. 11 and a group of Three Orchestral Songs (which remained unperformed and unpublished until the 1960s).

Webern did not begin to break through this stylistic impasse until 1917-19, when a new sense of direction and confidence crystallised in two groups of songs, Four Songs op. 13 for voice and orchestra, and Six Songs op. 14 to poems by Georg Trakl. These were followed, in 1921, by Four Sacred Songs op. 15; and four years later, by way of final resolution, by the Three Songs op. 18, in which Webern first consolidates his "mature" aphoristic style.

That, in broad over-simplification, was Webern's *Pierrot* crisis. It would have been a neat piece of thematic programme planning if Pierre Boulez had been able to include, in one of his two Webern Cycle concerts at the weekend with the Ensemble InterContemporain, the entire post-*Pierrot* sequence in a single *Pierrot*-related programme. But, no doubt for practical reasons, the theme was fragmented: on Saturday evening we heard the opp. 13, 14 and 15 songs contrasted with Berg and Schoenberg from different periods; and at Sunday lunchtime, only the three op. posth. songs and Five Pieces op. 10 mixed with later Webern and with a splendid assortment of more or less *Pierrot*-related Varèse, Stravinsky and Ravel.

The soprano soloist on both occasions was Phyllis Bryn-Julson, in firm and ample voice. I still do not find the works of this transitional period wholly convincing; but it was a special delight on Saturday to hear the opp. 13 and 14 songs, so often over-emphasised and texturally clotted in performance, given with such ease, naturalness and lyrical warmth. Boulez's direction was at its best, deft and sensitive, while following Miss Bryn-Julson's lyrical example; without her, notably in the choral pieces and Webern's eight orchestral fragments, it could occasionaly tend to the tight-lipped and brusque.

DOMINIC GILL

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The Ensemble InterContemporain programme on Sunday stretched out beyond the Viennese school, with not only Varèse's *Octandre* (exciting performance under Boulez, with fine Kraken-howls from the brass) joining the Webern, but Stravinsky and Ravel — the voice-and-ensemble pieces that represent their own responses to Schoenberg's *Pierrot*. Phyllis Bryn-Julson again lent her serene soprano to Stravinsky's intricate little Japanese Lyrics (and two earlier Balmont songs for good measure), and to Ravel's matchless Mallarmé songs. The latter sounded lovely, as they cannot help but do, but would have gained from more *Pierrot*-like brightness and attack; Boulez allowed them to seem exquisite idylls, too nearly bloodless to reveal their real depths.

In two of Webern's most extravagantly difficult song-sets, op. 17 and 18, Miss Bryn-Julson made the difficulties unbelievably light, and she was tender and musical with the op. 8 Rilke songs and also three of the fascinating posthumous songs (in some ways, dramatic beyond anything in the statutory *oeuvre*).

The chief Webern in this concert was, however, the Concerto, the op. 10 Five Pieces for Orchestra and the Symphony (in its "chamber version", which is to say simply with solo strings against the modest winds). Boulez's sympathetic, unhurried account of the Symphony was good enough to make one wish he *had* a full string complement; the Concerto was better still — quite remarkably lucid, and with a strong central piano among the excellent soloists of the Ensemble. The op. 10 Pieces, best of all, were rigorously gentle, perfectly tinted, unimprovable.

DAVID MURRAY

Arts Guide

Music/Monday. Opera and Ballet/Tuesday. Theatre/Wednesday. Exhibitions/Thursday. A selective guide to all the Arts appears each Friday.

December 9–15

Music

PARIS

Kurt Moll Recital, Cord Garben, piano: Schubert's Winterreise (Mon) Théâtre de l'Athenée (742 6727).

St John Smith Square orchestra conducted by John Lubbock, Igor Oistrakh, violin, Natalia Zertsalova, piano: Bliss, Haydn, Mozart (Mon) TMP-Châtelet (233 4444).

Solars Vorticés: Schoenberg, Marco, Fenelon, Garcin (Mon) Radio France, Grand Auditorium (524 1516).

Ensemble Orchestral de Paris conducted by Jean-Pierre Wallez with Maurice Andre, trumpet, Michele Pena, soprano: Haydn, Hummel; Bach, Albinoni (Tue) Salle Pleyel (561 0630).

Festival d'Art Sacré: Haydn – Quatuor Via Nova, Marc Bleuse – Akroma Percussion Quintet, Anne Fondeville, soprano, and choir (Tue) Saint-Séverin Church (277 1883).

Aal and Ralfi Petrosian: Grieg, Moszkowski, Rachmaninov, Liszt (Wed) Gaveau (563 2030).

Orchestre National de France conducted by Charles Dutoit, Pascal Roge, piano: Magnard, Ravel (Wed) Théâtre des Champs Elysées (723 4777).

Paris Harp Sextuor: Rameau, Dandrieu, Vivaldi, Boutry (Thur 12.30 am, 3 pm) Pleyel, Salle Chopin (561 0830).

Festival D'Art Sacré: Bach, Mozart, Schoenberg, Lenot, with Jean-Louis Gil, organ (Thur) Saint-Germain-des-Prés Church (277 1883).

WEST GERMANY

Berlin Philharmonie: The Berlin Philharmonic Orchestra and Concert Choir offers Bach's Christmas Oratorio conducted by Fritz Weisse. Soloists are Hanna Schwarz, Gudrun Sieber, Heiner Hopfner and Hermann-Christian Polster (Sat, Sun).

Frankfurt, Alte Oper: piano recital with Rudolf Buchbinder playing Beethoven Sonatas (Tue).

London Symphony Orchestra under Claudio Abbado: Schubert, Mahler and Beethoven (Wed).

Berlin Philharmonic Orchestra conducted by Seiji Ozawa, with baritone Dietrich Fischer-Dieskau; Mozart, Mahler (Thur).

ZURICH

Tonhalle: Tonhalle Orchestra, conductor Dennis Russell Davies, Walter Grimmer, cello: Debussy, Yun (concerto for cello), Mussorgsky (Wed). Chamber Music with the Tokyo String Quartet: Haydn, Schubert, Ravel (Thur) (201 1580).

LONDON

Royal Philharmonic Orchestra, conductor Walter Weller, Tamas Vasary piano: Mozart, Dvorak. Royal Festival Hall (Mon) (928 3191).

London Sinfonietta & Voices, conductor David Atherton: Ravel, Vaisse Elizabeth Hall (Mon) (928 3191).

London Philharmonic Orchestra, conductor Vernon Handley, John Lill piano: Dvorak, Rachmaninov Piano Concerto No 2, Vaughan Williams. Royal Festival Hall (Tue) (928 3191).

Vienna Philharmonic Orchestra, conductor Zubin Mehta: Webern, Schubert. Barbican Hall (Tue) (638 8895).

Royal Philharmonic Society Chamber Orchestra of Europe with Salvatori Assnde, conductor and violin, and Iona Brown, violin, all Mozart programme. Royal Festival Hall (Wed) (928 3191).

Chilingirian String Quartet: all Beethoven programme. Elizabeth Hall (Wed) (928 3191).

Vienna Philharmonic Orchestra, conductor Zubin Mehta: Schumann, Schoenberg. Barbican Hall (Wed) (638 8895).

Royal Philharmonic Orchestra, conductor Walter Weller, Henryk Szeryng: violin. Beethoven, Brahms Violin Concerto, Strauss. Royal Festival Hall (Thur) (928 3191).

NEW YORK

New York Philharmonic (Avery Fischer Hall): Andre Previn conducting, Cecile Licad piano. Rachmaninoff, Shostakovich (Tue); Andre Previn conducting, Pinchas Zukerman violin. Gould, Bartok, Rachmaninoff (Thur). Lincoln Center (874 2424).

Julliard String Quartet (Carnegie Hall): Thomas Riebl viola, Nathaniel Rosen cello. Mozart, Brahms (Wed). (247 7459).

Musica Sacra (Avery Fischer Hall): Handel: Messiah (Mon, Wed). Lincoln Center (874 2424).

Wavery Consort (Church of St Mary): The Christmas Story collected from 10th to 15th century sources includes medieval procession of the prophets, Gloriosi et famosi (Wed, Thur). 139 W 46th, E of 7th Av (666 1260).

Merkin Hall: Manhattan String Quartet. Beethoven, Shostakovich, Schubert (Tue); Music Today. Gerard Schwarz conducting, Sol Greitzer viola, Richard Goode piano. Chavez, Berio, Perle, Kurka, Rolnick (Wed); Concerts Plus, Simca Heled director. Rameau, Gruenberg (Thur), 67th W of Broadway (362 8719).

Kaufmann Hall (92nd St Y): Chamber Music Group. Jaime Laredo director. All Mozart programme (Tue, Wed). 92nd & Lexington Av. (427 4410).

WASHINGTON

National Symphony (Concert Hall): Handel: Messiah, with Choral Arts Society (Mon, Tue). Kennedy Center (254 3776).

CHICAGO

Chicago Symphony (Orchestra Hall): Erich Leinsdorf conducting, Murray Perahia piano. Ruggles, Schumann, Mozart, Ravel (Thur). (435 8111)

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Defence and deterrence

THE BRITISH showing of the American television film, The Day After, on Saturday evening almost coincided with a Nato ministerial meeting in Brussels which came back to the twin themes of defence and deterrence. Nato ambassadors, the communiqué said, were instructed to "undertake a thorough reappraisal of East-West dialogue." And that surely is the heart of the matter.

To start with a few inescapable facts nuclear weapons exist and cannot be disinvented. They differ from earlier weapons in their greater capacity to destroy and to do so more quickly. The best theory of defence over the ages has been based in the belief in the necessity to preserve a balance of power, so that no one power can afford to attack another with impunity. The theory of deterrence is based on the uncertainty created by the possibility that a power that is attacked, even by conventional means, might respond with nuclear weapons. Hence, so the theory goes, there has been no major wars between the great powers in the last few decades.

Adjustments

These theories are not perfect, and their weaknesses should be taken with the utmost seriousness. Yet so should their strengths. The fact is that the United States and the Soviet Union have avoided large-scale conflict, and one of the reasons for that is their mutual appreciations of their great destructive power if it were ever put to use. That is deterrence at work. Even now, when relations between Moscow and Washington are at an unusually low ebb, there is no expectation of a war on the central front. The balance of power prevents it, and both sides know it.

Indeed, even if there were to be no early resumption of talks on arms control, it is unlikely that the balance of power on the central front would change very much in the foreseeable future. The deployment of new systems, sufficient to change the balance and to make a risk worth taking, requires too long a time, and in any case the other side always reacts by making its own adjustments.

The search for the causes of present instability and nervousness leads elsewhere. Some of the older campaigns for a more peaceful world seem to have been, at least temporarily, abandoned. For example, there is now no great steam behind the attempt to seek more signatories to the treaty on the non-proliferation of nuclear weapons. There is no impulse behind the possibility of a comprehensive test ban treaty, either. And even the idea of a nuclear freeze, which would, of course, have to be subject to verification, has won rather less support than it might have done.

Reconciliation

Moreover, relations between the super-powers have not really been breaking down over the issue of the deployment of long-range theatre nuclear weapons in Europe. Those are the symptoms rather than the cause. If there were to be serious conflict, it would be much more likely to arise from events getting out of hand in Lebanon, Iran, Iraq, the Middle East in general, or even Central America. The situation on either side of the Elbe is, if not stable, at least containable.

The breakdown in super-power relations has come about on a much more worldwide basis than the old East-West divisions. Washington and Moscow no longer trust each other, no longer know what the other is doing and perhaps are unclear about what they are doing themselves. That does not make it easy for them to take others with them.

It would be idle to pretend that all will be well again if the talks on arms control resume in Geneva in the New Year. Diplomacy is not just about the number of warheads or launchers. What is needed is a much wider political framework—a will to seek agreement despite the difficulties. At the moment, neither the will nor the perception of the wider framework seems to exist.

In a small way, Mrs Thatcher provided a pointer at the weekend by seeking a reconciliation with the new President of Argentina. The gesture was as unexpected as it was magnanimous. But it was also a recognition of reality. It is better to negotiate than to pursue confrontation. There is a lesson there for great powers as well.

More choice for house buyers

MR AUSTIN MITCHELL'S Bill on conveyancing, designed to remove part of the monopoly granted to solicitors by William Pitt the Younger in 1804, will be debated in the House of Commons later this week.

The changes proposed in Mr Mitchell's House Buyers Bill are modest. It would leave over half of all private homes, including flats, unregistered houses and most new houses, within the solicitors' monopoly, excluding from it only conveyancing of registered property. It is reasonable to assume that solicitors could also retain the greater part of this liberalised business because of their links with the client, provided that they are willing to compete in price and efficiency with banks, building societies and professional conveyancers licensed under the proposed legislation.

The Bill contains a number of practical proposals which would enable a house seller to commission surveys for the benefit of prospective buyers and penalise local authorities for delays in answering inquiries. The desirability of such improvements can hardly be contested, and they need not necessarily be linked with the clipping of the solicitors' monopoly.

Those opposing the monopoly argue that it makes conveyancing too expensive — though it is not as expensive as the services of estate agents when these consist only in an introduction of the two parties which could be more efficiently achieved by a mini computer. Solicitors are said to be dilatory — although the delays are often in the interests of their clients who are waiting for a buyer or seller or the approval of a mortgage.

Argument

The solicitors argue that they protect the house buyers by their superior legal skill; yet most of the work is done by junior clerks without any legal skill. The clients' main protection is the solicitors' indemnity insurance, but the Bill would require the same from other conveyancers — indeed, it may be easier to obtain an admission of negligence from someone not backed by the Law Society.

A more realistic argument is that conveyancing, which provides by far the greatest part of the solicitors' income, must remain their monopoly because it subsidises other unprofitable legal services which they are expected to supply. However, such a disparity of reward must be a powerful incentive to concentrate on conveyancing and to neglect the provision of the other, loss-making, services.

Benefits

The real benefits of allowing competition to rationalise this arcane department of British life go far beyond the saving in conveyancing fees and the expediting of business. Greater involvement of banks and building societies is bound to generate pressure towards faster registration of land so that transfer of property can be made as simple as it is in most continental countries of Europe. Taking a longer view, it should not be beyond the imagination of building societies, once they had a more direct involvement in the legal arrangements, to provide cheap bridging loans which would obviate the need for the long chains of house transfers which bedevil most British house owners every six years on average, and militate against the mobility of labour which is so badly needed.

For solicitors to have to give up part of their present monopoly may prove to be a blessing in disguise. They will be obliged to give greater attention to other legal business and to become better lawyers in the process. Their claim to appearance before higher courts would be strengthened. Their clients would then benefit from having to pay only one lawyer instead of two or three, and by greater speed resulting from a smaller number of professionals involved. In the same way, the house buying public as well as solicitors would benefit if English solicitors were allowed to combine their present activities with those of estate agents as Scottish solicitors are, without any harm to their professional integrity.

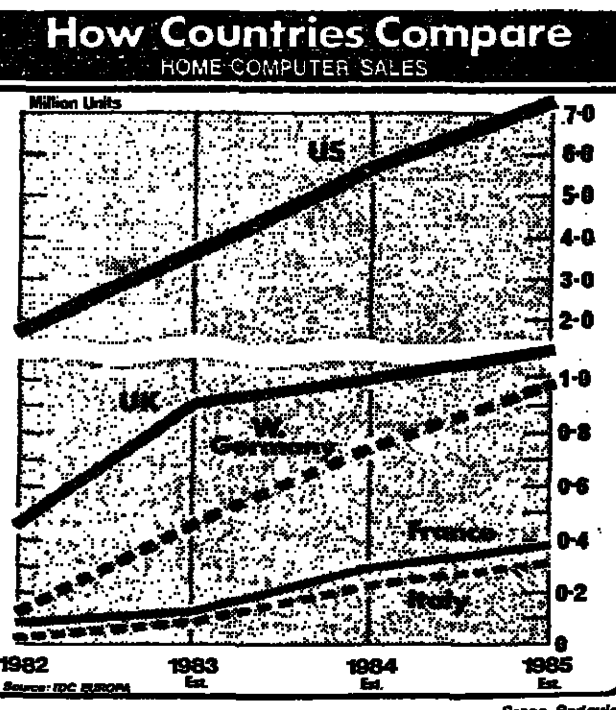
It is encouraging that most Ministers now favour the Bill, though less satisfactory that the Government appears anxious to restrict conveyancing to banks and building societies. Licensed conveyancers seem the most likely of the three groups to bring real competitive edge to the business and would, under the Bill, be covered by indemnity insurance. But against the entrenched opposition of the legal profession two-thirds of a loaf would still count as an impressive achievement for Mr Mitchell.

BRITAIN'S HOME COMPUTER BOOM

'They're walking off the shelves'

By Jason Crisp

Trevor Humphries



Brana Radovic

Computers being sold at Hamleys toy shop in Regent St, London.

THIS Christmas, British homes will be flashing, bleeping and buzzing to the sounds of Hungry Horace, Lunar Jet Man, Purple Turtles, Sheer Panic and Metagalactic Llama. An extraordinary boom in home computers—many of which are used for playing games—has caught some of even the next optimistic manufacturers and retailers by surprise.

Britain has more computers per head than any other country in the world. By the end of this year about one in ten homes will have a computer and the country is at present buying more of them than the rest of Europe put together.

Yesterday Sinclair Research, the company which more than any other started Britain's love affair with the computer, celebrated the production of the one millionth Spectrum at its main sub-contractor, Timex, in Dundee (the company has already sold more than 1m ZX81 computers worldwide). Sir Clive Sinclair has been kicking himself for underestimating the Christmas demand. His computers have at times been very scarce and the company has cut back almost all its advertising. Sinclair believes it could have sold half as many again as the 300,000 units it will have sold in the last three months of the year.

The new Electron computer from Acorn, the company which makes the highly successful BBC microcomputer has been in even more dramatic short supply. The Electron, at £200, is half the price of the BBC Micro. And demand has been particularly strong because it is compatible with the BBC Micro which is widely used in schools. There have been hundreds of requests for the Electron at branches of W. H. Smith.

"We have had 200,000 orders from retailers, which is just ridiculous," says Mr Tom Hohenberg, marketing manager at Acorn.

Only a few thousand Electrons have actually reached the shops, although they are being airfreighted from the manufacturers Astec in the Far East. (AB Electronics in the UK is to start making the Electron early next year.)

Last Christmas—the first year home computers became a significant consumer purchase—most shops had virtually sold out by mid-December. It looks as if everyone has underestimated demand again. "I don't remember a product which has developed so rapidly in such a short time. We started selling personal computers right from the start . . . but the growth was not spectacular. Then suddenly from October onwards sales leapt ahead. It was beyond the bounds of all expectations," says Mr Peter Jackson, marketing director of Rumbelows, a major retailer of electrical goods. "They're walking off the shelves," says another dealer.

The surge in demand is a major reversal of the depressed state of the personal computer industry earlier this year. In the U.S. a major price war sent company results and their stocks tumbling—particularly Texas Instruments, Atari which is owned by Warner Brothers, and Coleco. In the UK, Grundy and Iotech went into receivership (both have been bought by other companies), Dragon had to be rescued with a major cash injection and at least one other company has been in difficulties.

The UK manufacturers say there are a number of reasons for the current shortages. They predicted substantial growth but without total conviction because of the lack of any real experience in this very new market. The disastrous summer for personal computers in the U.S. made some companies more cautious still. And industry sources say that companies like Sinclair did not step up production as much as they might have done because they expected large volumes of the Electron to appear on the market.

But the shortages of the Electron and Spectrum have undoubtedly boosted sales of other manufacturers and may have even saved some of the smaller companies from bankruptcy.

In the U.S. the picture is now much the same. Manufacturers are struggling to meet a pre-Christmas demand estimated to be worth $2bn. The major retailers have been placing last minute orders with the manufacturers to replace Texas Instruments products now that the company has withdrawn from the market. The late delivery of Coleco's Adam home computer has put added pressure on the market.

Shortages of parts—semiconductor chips, disk drives and other sub-assemblies, have limited the production capacity of several U.S. home computer makers during recent months as the component manufacturers have turned their attentions to more complex and more profitable devices.

IBM's entry into the home computer market with the announcement last month of the "PC JR" came too late for Christmas sales, so the U.S. giant's appeal has not yet been fully tested in the market place.

IBM will not deliver demonstration units to retailers until the New Year and some buyers are happy to wait until then. On the other hand IBM's announcement seems to have created pent-up demand for home computers which is now expected to translate into sales of other manufacturers' products.

In the higher price, home/business personal computer segment of the market, Apple IIE computers, IBM PCS and the dozens of IBM-compatible imitators were in plentiful supply last week in U.S. computer stores, despite earlier predictions of shortages.

In Britain, the three major suppliers of home computers are Sinclair Research with the ZX81 and the Spectrum; Commodore, the U.S. company, with the VIC-20 and the 64; and Acorn with its BBC and Electron computers. Atari, also U.S.-owned, has been doing well in Britain recently. Other British companies include Oric, Dragon and Lynx.

In European terms Britain is, by any standards, a remarkable market.

● West Germany and France have not produced nearly as many microcomputer entrepreneurs as have been springing up in both the U.S. and the UK.

● The Department of Industry's Micros in Schools scheme, which has subsidised the cost of the computers, is more advanced that similar schemes in other countries and has been a major boost for companies such as Acorn and Sinclair.

The scheme was launched in April 1981 and a total of £21m is available to help primary and secondary schools buy microcomputers and peripheral equipment. Three micros are approved under the scheme: Acorn's BBC, Research Machines' 480Z and the Sinclair Spectrum.

According to the latest figures from primary schools 84 per cent have chosen the BBC computer, 11 per cent chose Research Machines and just 4 per cent opted for the Spectrum.

● The English language has meant most of the U.S. companies have launched their products and software in Britain first after the U.S.

● The high levels of skill in writing computer software in Britain has in turn stimulated the market.

"There is probably more talent per capita in computer software skills in the UK than any other country in the world," says Mr Howard Stanworth, general manager of Commodore in the UK. Commodore, which claims to have the largest sales of personal computers worldwide, uses British-written programmes extensively.

The reason that the computers themselves are selling so well, says Mr Simon Pearce, senior consultant at IDC-Europa, a subsidiary of the U.S. consultants International Data Corporation, is that "Parents seem to be very worried about their children. They have this ridiculous idea that you will have to know how to program a computer in future in order to get a job. Yet by the time they are grown-up computer applications will be much easier to use.

"People see computers as a justifiable expenditure because it is seen as giving the child a better chance in life. The children, who know much more about computers, are certainly not going to contradict their parents."

Acorn believes the children also know what computer they want—although the shortage of Electrons is boosting the sales of other companies' products (Acorn claims a number of potential Electron purchasers are trading up and buying the more expensive BBC Micro at £400).

Mr Hohenberg, of Acorn, adds that children get bored with using the computers for video games and do use them to write their own programs, presumably to their parents' relief. They also use them with educational programs.

A major worry for the manufacturers now is whether this year's pre-Christmas boom will merely be a fad with a sharp fall in sales next year. Mr Eric Salamon, marketing director of Atari in the UK says: "The evidence is it won't die away. Overall we expect the market to grow next year by between 15 and 20 per cent." Most companies broadly share his view, though they expect a lean first quarter.

But the nature of the business is beginning to change. As the base of computers has grown, so the opportunity to sell peripheral equipment has become much greater. Mr Howard Stanworth at Commodore says: "The computers are only part of the story. The disc drives, the colour monitors and printers vastly expand the usefulness of the machine. In two years time the computers themselves will account for only 20 per cent of our total sales—at the moment it is about 70 per cent."

But the strength of the UK home computer market does not mean that all the British companies in the field will survive. "The UK manufacturers are doing very well but they don't have the domestic market potential to survive in the long term. The companies which will survive are those shipping internationally on a large scale," says Mr Pearce, of IDC.

Both Acorn and Sinclair have substantial overseas sales but know they face severe U.S. and—in the future—Japanese competition. Acorn has just started shipping the BBC micro to the U.S. for the education market, a strategy that has been widely criticised because of the highly competitive market there. But Acorn is optimistic and has just increased its forecast U.S. sales from 30,000 to 50,000 for next year.

The Japanese consumer electronics companies are another long-term threat to the smaller British micro companies. So far the Japanese have been rather conspicuous by their absence — although Sharp and Sord are doing quite well in the UK. Although the Japanese companies are highly skilled at mass manufacture needed top produce low cost computers there is a problem with available software.

Most of the home computers use slightly different operating systems which means the software has to be written specifically for each machine. The volume of software that is available is a vital selling point for any micro. Any move towards a common standard in home computers — as there is in business personal computers — would open the door to the Japanese manufacturers.

For now the primary concern of any company in the UK market is to get more products into the shops. Business is certainly frenetic: "The computers which come into our warehouse don't touch the sides before they are out again to the shops," says one large distributor.

Additional research by David Churchill and Louise Kehoe in San Francisco.

THE UK TOP TEN

Home computers costing less than £1,000

	Model	Price	Source for UK†
1	Commodore 64	£220	Corby
2	Sinclair Spectrum	£99	Dundee
3	Acorn BBC	£399	Gwent
4	Commodore VIC 20	£140	Corby
5	Oric 1	£99	Feltham
6	Dragon 32	£170	Port Talbot
7	Texas Instruments 994a	£90	Texas, U.S.*
8	Sinclair ZX81	£40	Dundee
9	Atari 800	£300	Hong Kong
10	Apple IIe	£750	Cork, Ireland

Source: Personal Computer News, compiled by MRIB (Computers)
† Final assembly. * Manufacture recently ceased.

Men & Matters

Business head

London Business School may have chosen an academic as its next principal instead of a businessman (as Sir Terence Beckett, chairman of the governors, had in mind), but Professor Peter Moore is no ivory tower dreamer.

One of his favourite relaxations is travelling by train: "Because I like trains—and because it is the best way to meet people and see places," he says.

On a recent visit to the Far East, he took a seven-hour train journey from Singapore to Kuala Lumpur rather than hop across country in a few minutes by air.

Moore, aged 55, joined LBS as professor of statistics and operational research at its inception in 1965, after spells as a university lecturer, and in industry with the National Coal Board and the Reed Paper group.

When co-founder of the LBS, Prof Jim Ball, became principal in 1972, Moore became his deputy, and has been closely associated with the school's extensive development over the past decade.

His expertise has been in demand, both from private management and public bodies outside the LBS.

Moore was a consultant to the Wilson Committee on Financial Institutions; he is a member of the Doctors' and Dentists' Pay Body and vice-chairman of the University Grants Committee.

The LBS has come through the recession and recent higher education economies remarkably well. And Moore takes over as a number of projects and developments are being initiated.

The new part-time MBA course got off to a good start this year. "It has enabled us to tap a much wider constituency," he says. "People from a much wider business background—from the public sector, small businesses, and self-employed—are now coming in."

"But think of all the TV spin-offs—hosting chat shows, voice overs, endorsing tyres"

In all some 2,000 executives a year are now attending courses at the school. And Moore is enthusiastic about the LBS's expanding role, especially in research.

The new Centre for Business Strategy, in little more than a year, has begun to tackle a wide range of problems related to the UK's comparatively poor industrial performance. And funds are now being raised for a research chair in marketing and communication.

Hitched up

Morgan Stanley, most blue blooded of the Wall Street investment banks, has landed an unexpected piece of business — management of the $3.5bn pension fund of the Teamsters Union.

The fund, you may recall, does not have an unspotted record. It has probably led to more charges of corruption and spilt blood than any pot of money in U.S. history. At one time, a large part of its assets was invested in Las Vegas casinos.

Such was the corruption, in fact, that it was mainly responsible for the enactment by the U.S. in the early 1970s of ERISA, the law that tightly controls where pension fund managers can place their cash.

The fund has been cleaned up now, which is why Morgan felt able to bid for it. Even so, I gather, the deal caused some controversy along Morgan Stanley's well-carpeted and veneered corridors. Not quite the sort of job, some thought, for a house that counts the British Treasury among its clients.

But then Morgan is hungry for funds management business. It is a small player in this multi-billion dollar game. Before the Teamsters came along, it had about $7bn, whereas the market leaders have five times that figure.

No space

Video games, have been meeting strong official resistance in several Far East countries. Now comes news of a revolt against space invaders in the United States.

The video and arcade games machines in the small New England coastal town of Marshfield have been carted away in trucks after the Supreme Court refused to hear an appeal against a town ordinance banning them.

So the 20,000 townspeople have won an 18-month battle against the machines' owners and supporters. And in the process they may have begun a new nationwide movement.

While other U.S. communities, worried about adolescent passions for the machines, have attempted to regulate their use, Marshfield went a step further.

Led by Tom Jackson, a retired state drug squad policeman, the people of Marshfield voted in June 1982, to throw the machines out of town—overturning the liberal regulations favoured by the town's leaders.

Owners of the games machines fought the eviction order all the way to the Supreme Court, arguing protection under the Constitution's first amendment which protects the rights of free speech. They even hired a Chicago constitutional lawyer who pleaded that the arcade games were a medium of communication.

Now that route has failed, the merchants plan to try to overturn the ordinance at the town meeting next year.

In the meantime, with profits slipping away, they are making handsome one-off gains by selling the equipment second-hand to overseas buyers in places like Egypt, among others.

High note

A number of City stockbrokers were keeping their heads down as they tip-toed up to the eighth floor of the Savoy hotel last week for a second interview with Merrill Lynch, the giant U.S. securities firm which is planning to set up shop in London next year.

An initial group of 80 investment analysts has been whittled down to 30, of whom only 20 will be offered a job with Merrill's, as City types are already familiarly calling it.

But why would a well-paid broker want to leave a top spot at, say, Scrimgeour's, Greenwell's, or Capel's for a seat down the table at Merrill's?

The interviewer at the Savoy has one answer. "What you are doing now," he has been telling the men at his door, "is like playing the piano in your living room at home. Joining our firm will be like playing the organ in Westminster Cathedral."

Civil law

Sign in a Whitehall office: "If in doubt, delegate."

Observer

FOREIGN AFFAIRS

The lessons of The Day After

By Ian Davidson

IT WAS not very clever of Mr Michael Heseltine, the British Defence Secretary, to have clamoured for a right-of-reply on TV to the nuclear war film The Day After; and it was not very brave to have backed out of a debate with the other commentators. Of the two, the lack of bravery is the more surprising.

Mr Heseltine's changes of mind suggest a disturbing degree of over-reaction to what is, after all, in so many ways a hyped-up media event. The main message of the film — the message in the foreground, as it were—is that nuclear war would be indescribably horrible.

So what else is new? As a series of images, the film is undoubtedly a shocking portrayal of the horror. But as a general statement—that nuclear war would be indescribably horrible — the film adds nothing new in principle to what we have all known ever since the first minimal atom bomb was dropped on Hiroshima.

On the contrary, if anything, the film understates the full horror of a nuclear war. In the first place, it asks us to assume that such a war could be stopped before the total destruction of both sides, and possibly of civilisation itself.

We do not know if such an assumption is plausible; it is certainly not reliable. In the film, the ghostly messages from the American President requires us to believe, first that the U.S. and the Soviet Union both took conscious decisions *not* to strike at each other's national command systems (so as to maintain the possibility of intra-war negotiation); and/or, secondly, that the U.S. President and his command-and-control system could survive deliberately attempted attacks on them; and/or, thirdly, that the command-and-control systems of the two sides would not fall victim to the (possibly unintended) side-effects of nuclear explosions, which would be likely to knock out electric and electronic circuits necessary for command-and-control.

In recent years, strategists in the West (and, presumably, in the East, as well, though we do not know) have become increasingly pre-occupied with the command-and-control problem. The Reagan Administration is spending a *lot* more money in the hope of protecting electric and electronic circuits against the destructive effects of Electro-Magnetic Pulse (EMP), the colossal emission of electric energy which may accompany a nuclear explosion.

Yet the plain fact is that command-and-control systems are inherently vulnerable to disruption: the helicopter transport which is supposed to take the U.S. President from the White House to some airfield where he can board his airborne command post; the problematic ultra low frequency (ULF) and extremely low frequency (ELF) radio communications with submerged submarines; thin-skinned photographic and communications satellites in orbit; not least, the Bell telephone system on which a large part of America's strategic communications still depend.

Nobody can know at what level of nuclear exchange these command-and-control systems would go down, how many commanders and controllers would be killed, at what point an American President might lose his sang-froid. Presumably the film-makers took the best advice they could find. My own hunch is that the sequence of events—a large-scale nuclear exchange, of at least 300 missiles landing on the U.S., followed by an orderly cease-fire—assumes a survivability of command-and-control systems which lies right at the most optimistic end of what is conceivable.

In a seminal paper for the International Institute for Strategic Studies, two years ago, Desmond Ball argued that nuclear war would almost certainly not be controllable in this way. His argument was reinforced and extended in a very recent book by Paul Bracken, The Command and Control of Nuclear Forces.

If that is a more plausible view, then the film, so far from over-stating the horror of nuclear war, seriously understates it. The most recent scientific study, carried out in the U.S., concludes that a major nuclear exchange would throw so much soot up into the atmosphere, that the sun would be blotted out and the earth would enter a nuclear winter which would kill off most plant life.

However, the picture of hell conjured up by the film does not, *for all that*, necessarily constitute an endorsement of the views of the Campaign for Nuclear Disarmament. Russian leaders and strategists are just as conscious as their western counterparts of the dangers of nuclear war: Soviet and American doctors and scientists have collaborated in studying and publicising these dangers.

In that sense, the film ought to reinforce the case for mutual nuclear deterrence. If the probable consequences of conflict would be as bad as portrayed, then both sides in the East-West confrontation ought to remain as careful as they have been for the past 30 years. And if the consequences would be much worse, as some scientists now think, with the virtual extinction of civilisation, then the super-powers ought to be even more careful.

It may be that the film, far from over-stating the horror of nuclear war, seriously understates it

The film does not endorse the paranoid fears of some people on the far right in America, that Moscow could execute a disarming attack on the U.S.; on the contrary, the Soviet Union is said to have suffered as much damage as the U.S.

The trouble with this reassuring view, is that it assumes that mutual deterrence can remain perfectly water-tight for ever. Yet the West has saddled itself with two different views of nuclear weapons which are mutually contradictory.

On the one hand, there is the balance of terror which is designed to deter the Russians from starting anything which could lead to nuclear war. On the other, Nato has equipped itself with a vast gamut of nuclear weapons, from long-range intercontinental ballistic missiles right down to short-range nuclear artillery.

The ostensibly seamless web of escalation is designed to ensure perfect deterrence; but the battlefield nuclear weapons are there in Europe, ostensibly to enable Nato to fight off an overwhelming conventional attack by the Soviet Union.

A scene from "The Day After," shown on British commercial television on Saturday

In other words, if deterrence holds, all well and good. But if it breaks down, then the structure of Nato forces will confront the Alliance with the appalling choice between defeat and the inauguration of a nuclear war whose outcome cannot be predicted, and probably cannot be controlled. In Nato parlance, this dilemma is disguised under the term "flexible response"; but if Desmond Ball and Paul Bracken are right, there may be nothing flexible about it. Bracken characterises the Nato force structure in Europe, in which conventional and nuclear weapons are inextricably mingled, as a regional doomsday machine.

In the film, the sequence of events which leads into nuclear war is not entirely clear, but two points stand out: first, that the Soviet invasion was not a cold-blooded enterprise, but a response to major trouble in East Germany and Berlin; second, that Nato responded by using nuclear weapons. Given the strains inside the Soviet empire, this is not a scenario which can be simply dismissed as inconceivable.

Most serious stategists believe that nuclear deterrence against a cold-blooded Soviet attack is probably as stable *now* as it has ever been. The Soviet attainment of nuclear parity with the U.S. has to some extent weakened the credibility of America's extended deterrence—the willingness of an American president to risk American territory in the defence of Europe — but even a 5 per cent danger of an inter-continental war is almost certainly enough to deter a deliberate Russian attack from cold. What it may *not* deter is an unintended and uncontrolled sequence of events in which one thing leads to another.

If this is the problem faced by Nato, then unilateral nuclear disarmament is certainly not the solution. For the alliance to abandon nuclear weapons, while the Soviet Union retained its nuclear weapons as well as a very substantial advantage in conventional forces, would be to invite, if not military attack, then at least political intimidation.

Nor is there any salvation in arms control negotiations, valuable though these would be on other, especially political, grounds. By definition, any nuclear arms deal would still leave both sides with an enormous capacity for overkill; and because verifiability would be a key requirement for both superpowers, arms control agreements are least likely to cover those battlefield nuclear weapons which risk being used first, because they are the least verifiable except by intrusive inspection on the ground.

If there are solutions to the nuclear problem, they may lie along two parallel axis: first, by working towards a much clearer separation between conventional war-fighting deterrence, and second-strike nuclear deterrence; second, by concentrating on the politics of pre-war crisis control.

Mr Robert McNamara, President Kennedy's Defence Secretary and one of the original architects of flexible response, is now one of the many advocates of reduced reliance on nuclear weapons. In the TV discussion after Saturday night's film, he said: "There is no military use for nuclear weapons, other than as a deterrent." Surprisingly, Mr Heseltine seemed almost to agree with him.

If Nato is to reduce its dependence on nuclear arms as war-fighting weapons, as more and more people agree it should, it follows that the alliance must continue its efforts to improve the conventional balance vis-a-vis the Warsaw Pact. Nato's decision to withdraw 3,000 shorter-range nuclear weapons from Europe over the next few years is obviously a step in the right direction; its decision to abandon the target of an annual 3 per cent real increase in conventional defence spending is less reassuring.

Equally important is the parallel track of crisis management. The abandonment by the Soviet Union of the Euromissile negotiations in Geneva, and the apparent adjournment *sine die* of the strategic nuclear arms talks, are cause for concern. But it is arguable that even more important opportunities are at stake in the negotiations on confidence-building measures in Europe which open in Stockholm next month.

On the one hand, these are designed to draw up arrangements for reciprocal notification of military activities in peacetime, so as to guard against surprise attack and, equally important, against war by misunderstanding. On the other, the negotiations should provide a forum for East-West dialogue in which the megaphone diplomacy of the superpowers may be tempered by the participation of the European countries. No doubt the Russians will try to use Stockholm as a platform for propaganda. But there is at least an opportunity for serious negotiations on measures to ensure that the day before is never followed by The Day After.

Lombard

Where the new jobs will be

By Samuel Brittan

I NEVER thought that I would live to see the day when a TUC paper would be of higher quality than a Treasury one on an identical topic. But this has proved to be the case with the respective papers submitted by the two bodies for last Wednesday's National Economic Development Council discussion on the topic "Where are the new jobs coming from?"

Only chalatans will claim to have a precise answer to the question. But it is nevertheless true that in a well functioning economy the jobs will come. The myth that there are profound technological changes that condemn us to "jobless growth" is often enunciated by businessmen in saloon bar discussions and is now becoming fashionable among some Tory "wets," who have given up on genuine economic policy. It has now been knocked firmly on the head, not by the Treasury, which should have done so, but by the TUC authors. As they remark:

"Two centuries ago, the overwhelming majority of the working population was employed on the land. If, during one of the periodic crises of recession and unemployment in that period the question of where new jobs were coming from had been raised, it would have been impossible to envisage that the answer lay in a rapid upheaval characterised by a massive move of population from the land to cities and a rapid restructuring of economic activity from agriculture to manufacturing."

Of course the TUC paper overstressed the role of demand management in securing satisfactory growth and employment and did not discuss the links between pay and jobs. But the Treasury paper itself skated very gingerly over the latter, mentioning it briefly and last.

Perhaps the Treasury paper deliberately pulled its punches not to spoil the atmosphere for the tripartite discussions on job creation, which the Government, CBI and TUC want for different reasons. There are no illusions on any side about a return to tripartite management of the economy (fortunately); but the feeling is (a) that discussion is preferable to the aggressive speechifying of the recent past, and (b) that even modest agreements, say on training and youth employment, are worthwhile and may enable more contentious matters, such as profitability and wages, to come on to the agenda later.

No disagreement. But the Treasury paper should still have been of better quality. The common core of the two papers was an analysis of past changes in industrial and occupational composition both in the UK and in the U.S. These showed the familiar picture of a shift away from manufacturing and manual occupations to services, including leisure and education. But even here the TUC went into more interesting detail and said much more about Japan and other European countries as well as the U.S.

The Treasury could have taken discussion further. There are, for instance, problems about relating "pricing out of work" to the national income statistics. The CBI and TUC have come out with divergent factual assertions about movements in labour and profit shares, divergences which official economists and statisticians would have helped to elucidate. Then again there have been academic attempts to estimate actual real wage-employment equations. The earth would not have opened up if the Treasury had summarised and analysed this work.

The contrast that stands out is between the sophisticated technical discussion on which top Treasury men insist in short-term forecasting or in speculative work on the narrow money supply, and the undergraduate essay treatment they accept on long-term structural matters. The whole point of the "new realism" which displaced old-fashioned demand management was the belief that output and employment were ultimately determined by real forces rather than financial policy. It therefore follows that these real forces should receive just as high grade official attention as the monetary strategy or the Budget.

It would also help if the convention of ascribing all official papers to the Chancellor, the Secretary of State for Industry and so on, could be abolished. Any political embarrassment from naming the real authors (as already occurs with Government Economic Service and Bank of England papers) would be no more than outweighed by the greater care that would then be taken.

Letters to the Editor

Pricing and secrecy in the heavy fuel oil market

From Mr J. Wareham

Sir,—I was delighted to read that Petrofina (December 1) prefers openness and transparency in the heavy fuel oil market because the present secrecy only leads to mistrust.

In the circumstances buyers have resorted to defensive measures and we participate in a group which exchanges information on a national and international basis. The figures we have obtained from these exchanges have fully justified the confidence we have in our existing oil supplier. This survey and the phone calls I have received over the last week have confirmed that our current price compares favourably with similar buyers, and, that product prices have moved sharply upwards while the spot price for crude has dropped by 10 per cent.

Why these price changes are in opposite directions remains outstanding and there appears to be no justification for the adverse differential which has appeared time after time between UK and other European factory gate prices.

J. E. Wareham.
24, Broomhurst Avenue,
Coppice, Oldham, Lancs.

Service to the customer

From the Chairman and Managing Director, TI Domestic Appliance Service

Sir,—On November 21 your newspaper carried an advertisement for the British Telecommunications Unions' Committee, comparing the respective qualities of service for telephones and domestic appliances. The statements concluded that most domestic appliances were repaired by private companies, who levied "heavy" repair charges with excessive delays. On the other hand, BT repaired 90 per cent of telephone faults within 24 hours free of charge.

The comparison makes no reference to the differing objectives, or the cost/benefit criteria used by the different organisations, in determining those objectives. Suffice to say that these criteria are examined by domestic appliance companies within a very competitive market. I do not know how BT approaches objective setting, but I would suggest that a 24 hour response for some business customers is excessive, and they would pay more for a faster service, while domestic customers may be prepared to wait longer for a lower rental. I do not wish to use your valuable column space on a free market dissertation; I would, however, like to comment on specific points.

Telephones are not "repaired free of charge". We rent a "service" from BT, and inherent in that service is its continuity — consequently I believe that I pay for maintenance within the rental.

Just because 80 per cent of telephones are repaired within 24 hours, "free of charge" does not make the organisation "efficient". It may meet this objective very inefficiently. What are the criteria it uses for efficiency measurement? Without effective competition, this is difficult, if not impossible, to compare.

A significant proportion of domestic appliance repairs are undertaken by the Gas and Electricity Boards, other nationalised industries, owned by us all and accountable to Parliament. They at least compete on service and can compare efficiency with the market place.

This is the "nub" of my argument. I do not believe that washing machines and telephones can be directly compared, either in terms of reliability or maintenance cost. Better comparisons are rented TV, or computers. All domestic appliance service companies have "horror stories", but so does BT, though neither organisation encourages them. We in domestic appliance services, however, either private or nationalised, at least run the gauntlet of the market place in open competition. If the unions committee is so sure of its service and its efficiency, surely it has nothing to fear from competition.

A. T. V. Bourke.
Radiation House,
North Circular Road, NW10.

Search for the crock of gold

From Mr T. Cattermole

Sir,—The article by Terry Garrett (November 28) concerning the expatriate's search for the crock of gold contains several misleading items.

There is no mention of the one-sixth rule in the section on establishment of non-residency status—this is vitally important for the expatriate whose first 12 months abroad do not exactly span one tax year (from April 6 to following April 5) and who actually returns to the UK without completing a full tax year abroad (it is theoretically possible to serve abroad for 728 days and never achieve non-residency status—under this circumstance if the one-sixth rule is broken then the expatriate will not enjoy the 100 per cent tax exemption to which he would be entitled).

Following the Chancellor's November statement offshore regular premium policies are of extremely limited value to any expatriate who intends to return to the UK. The qualifying status has been removed from such policies and there is therefore no question of life assurance premium relief being received nor any subsequent tax-free benefits.

UK-based life offices' savings plans take advantage of the 15 per cent bonus of LAPR and also provide totally tax-free benefits after 7½ years, either in lump sum form or as tax free income. If life assurance is needed to provide substantial benefits on death then term assurance is the most economical way.

Many expatriates are unaware that they can be eligible for LAPR even when they are working abroad—the criteria for this are based on the persons non-working spouse having accommodation available in the UK.

Offshore funds and life assurance plans have their place in the overall investment strategy, but their volatile nature, inherent risk and now the lack of relevance to the UK resident dictate a high degree of caution in their use.

T. R. Cattermole.
12, Third Avenue,
Denvilles,
Havant, Hants.

Mrs Thatcher's Seawolf

From the Chief Executive, British Aerospace Dynamics Group

Sir,—I note that your report (December 7) on the EEC summit was headed "President Mitterrand's Exocet." Although this was in the circumstances an apt analogy, one would not like to see the word "Exocet" become synonymous with "unstoppable (French) force," especially with the future of the EEC at stake.

In view of my company's anti-missile missile's success against Exocet during recent trials, I hope your sub-editors will shortly be able to use the headline "Mrs Thatcher's Seawolf," in the sense of "a deadly riposte."

Hugh Metcalfe.
British Aerospace
Dynamics Group,
Stevenage.

Noise from the motorway

From Mr P. Giffard

Sir,—Doubtless those who wish to build motorways quickly will study closely the sequence of events and procedures of the "long countdown" to the building of the Telford M54 motorway. Perhaps the scheme lost momentum when the inspector at the second public inquiry (1976) reached the conclusion that there was no urgency for the building of the motorway and said so in his report.

Certainly, advantage was taken of the time lag to discuss the environmental impact on the neighbourhood and many things have been done both by the Ministry and by private individuals which mitigate the visual effect of the road. It is said that efforts to reduce noise to an acceptable level have failed. The noise, throughout my property, is quite horrific. It is due not to the engines of vehicles but to the action of tyres upon the concrete surface. The concrete has been ribbed with grooves and ridges and it is this which seems to be the cause of the noise. It is at a level which is quite unacceptable in the countryside. Those who wish to reduce the environmental effect of new motorways should ensure that the type of surface on the Telford motorway is never used again.

Peter Giffard.
Chillington Hall,
Codsall Wood,
Wolverhampton.

A good record in forecasting

From Professor P. Minford

Sir,—Max Wilkinson (December 5) kindly notes the Liverpool group's good inflation forecasting record. He perpetuates the myth, however, that the group is "consistently over-optimistic about output." This is not true in the light of the Central Statistical Office's revisions to GDP data. 1982 is now seen to have been a year of reasonable recovery (about 2 per cent) and 1983 a year of still faster growth (more than 3 per cent on the expenditure measure which we forecast). Liverpool was one of the few to say this would be so, as far back as 1981; the consensus forecasts have been generally bearish on the recovery prospect and have had to be revised steadily upwards. The boot is therefore on the other foot; it is the consensus forecasters who have been consistently overpessimistic about the output recovery.

(Professor) Patrick Minford,
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FINANCIAL TIMES

Monday December 12 1983

Terry Byland on Wall Street

Car sales recovery aids steel

THE RENEWED upswing in Wall Street's steel stocks, awaited since mid-summer as the herald of the bull market phase two, seems to be a long time coming.

Indeed, the recovery in stock prices to date seems in danger of far outrunning any recovery in the real world of the steel industry's sales and profitability.

Stock prices for National Intergroup, U.S. Steel, Bethlehem Steel and the other major U.S. steelmakers now stand between 60 per cent and 100 per cent above their 12-month low points, although "you need a magnifying glass" to pick out the recovery in the industry, according to Mr David Healy, of Drexel Burnham and Lambert.

Increased demand for steel from the motor industry remains the one bright patch, but the capital goods industry is still sluggish, and foreign imports remain a bugbear. But there have been slightly more optimistic signs from the stock market over the past month.

A recovery in car sales at the end of November, together with a favourable Commerce Department forecast of U.S. capital spending prospects, backed up gains of around 8 per cent in Inland Steel and National Intergroup and 10 per cent in U.S. Steel.

The round of third-quarter results was at least up to stock market expectations, with National Intergroup, formerly National Steel, winning plaudits on all sides for its return to operating profitability.

Inland Steel fell short of the best hopes, but U.S. Steel's success in absorbing the Marathon Oil acquisition now raises hopes of a small profit next year.

The view that the worst has passed for steel stocks and that there are now prospects of capital appreciation rests upon plans already in place at the major companies for a restructuring which is "constructive for the industry" to quote one leading analyst.

Mr Paul Anker, analyst with First Boston, points out that the significance of write-offs for reorganisations and plant closures at major producers is that these companies have achieved a significantly lower break-even point, which will accelerate the earnings upturn when the turn comes.

Major write-off

The past quarter has brought a reorganisation of Armco's Middletown, Ohio, complex. The greatest move, though, is likely to come before the end of the year when United Steel is expected to announce a major write-off, perhaps as large as $1bn, in a further instalment of the shutdowns begun in 1979.

Write-offs of these proportions would add about $11.50 a share to the losses of £1.60 a share already predicted for U.S. Steel this year, *but savings, chiefly the substantial* reduction in the workforce, could be in the $40m range, which would enable U.S. Steel to trade profitably at a 50 per cent operating level, achieving a long-standing management target.

On this basis, U.S. Steel, the largest steelmaker in the U.S., could return earnings of $5 a share in 1984, assuming that Marathon Oil maintains the trend of this year's third quarter when it turned in about $231m, boosted by strong margins at refinery operations.

National Intergroup's name change in September also marked the final disposal of the Weirton subsidiary, which, from the parent company viewpoint, shed a subsidiary fighting to keep its feet in a contracting market, making steel for the canning industry.

It leaves National closer to its eventual aim of being a highly efficient producer of flat-rolled steel for the Detroit car makers. With successful operations in financial services and aluminium, First Boston continues to predict break-even results this year from National at earnings of $6 a share in 1984.

Like the rest of the stock market, steel issues are mesmerised at present by doubts over prospects for interest rates. But the doubts have particular significance for steel stocks, which have probably gained the maximum benefit from the strong rebound in the domestic car industry.

For a further advance, the steel companies need to see some indications in their order books of the long-awaited upturn in the capital goods sectors. But when such a recovery begins to show itself, then the newly shrunken operations of the major steel producers will be quickly reflected in a strong rise in earnings and stock prices.

Just as the Detroit car making *stocks in the upsurge in the market* at the beginning of this year, the steel issues could yet provide the lead for a renewed advance in 1984.

TAKEOVER BODY 'WANTS NEW BID CLARIFIED THIS WEEK'

Allianz in London talks on Eagle Star deadlock

BY JOHN MOORE, CITY CORRESPONDENT, IN LONDON

AN ATTEMPT will be made today to break the deadlock in the takeover battle between West Germany's Allianz Versicherung and BAT Industries of the UK for Eagle Star Holdings, one of Britain's largest insurance groups.

Mr John Hignett, director general of the Panel on Takeovers and Mergers, the City of London body which monitors the progress of takeover bids for public companies, will meet representatives from Morgan Grenfell, the merchant bank acting for Allianz, West Germany's largest insurer.

Morgan Grenfell executives were meeting Allianz's management at the weekend in Munich after a Friday meeting with the panel. Morgan Grenfell was telling its clients that the panel expects a promised new offer for Eagle Star to be clarified this week.

Last week, in a controversial announcement, Allianz said it intended to beat a £913m offer from *BAT, the tobacco group. BAT's bid* has already been recommended by Eagle Star's board.

No figures on the size of the likely offer were mentioned in the Allianz statement. Allianz persuaded the panel to allow it more time to detail the terms – meanwhile it had talks with Eagle Star management last Thursday.

Already the panel's decision to allow Allianz an interval before announcing its terms has provoked argument in the City. Under the takeover code, which is expected to be followed by parties in a takeover bid, *"when a firm intention to make* an offer is announced the terms of the offer . . . must be disclosed."

Last Thursday's meeting of Eagle Star and Allianz was inconclusive and the relationship between the two sides tense. Sir Denis Mountain, Eagle Star's chairman, has told Allianz that if it succeeds in taking his group there would be "a loss of business and staff morale".

He has condemned the "delaying tactics" of Allianz.

Morgan Grenfell is understood to be arguing before the panel that although nothing firm arose from Thursday's talks, which were designed to gain Eagle Star's support for any new Allianz offer, it needs more time to explore further possibilities of a deal.

Panel executives are becoming restive over Allianz's unprecedented tactics in the bid campaign, which in cash terms is Britain's largest takeover battle.

Allianz, however, is understood to have a contingency plan if it is forced by the panel to raise its bid before it has fully decided its next move. It may decide to raise its offer 1p above BAT's 660p offer for every Eagle Star share. That would comply with its indications last week that it would come back with a higher offer.

Both Allianz and BAT have until December 30 before they are obliged to make their final bids.

Mr Hignett will also see representatives from Hill Samuel, advisers to Eagle Star, and Lazard Brothers, advisers to BAT, at separate meetings this morning.

Leclerc plan to cut car prices threatens new discount clashes

BY DAVID MARSH IN PARIS

MONTHS of price-cut sparring among leading chains of French retail distributors have been given a new twist following announcement of a plan to slash prices of new cars by the Michel Leclerc petrol station group.

Leading French car groups and importers' organisations at the weekend were unsure how seriously to take the plan, unveiled by the brother of M Edouard Leclerc, who heads the nationwide Leclerc discount supermarket chain.

But it is clear that, if put into action, rebates of up to 10 per cent on marques such as Renault, Fiat, Austin and Opel could have a big impact on the French car industry. Both Renault and the number two French maker, Peugeot, are losing money heavily, and car sales, after holding up well in the early part of the year, are now starting to suffer from the Government's austerity programme.

Figures released over the weekend showed that new car registrations fell 4 per cent last month compared with November 1982, bringing the cumulative total for the year to 1.3 per cent below the first 11 months of 1982.

Already this autumn petrol price cuts at M Michel Leclerc's petrol stations and M Edouard Leclerc's supermarkets have forced the Government to raise the legal limit for price discounts at petrol pumps – provoking ire from small independent stations. More recently, the Edouard Leclerc stores have clashed with Carrefour, France's leading hypermarket company, in a no-holds-barred discount war backed up by lavish nationwide advertising.

M Michel Leclerc said at the weekend he intended to bring in car price cuts from January, apparently using garages in his retail network which have existing concessionary links with the big French and foreign car groups. Already experienced in legal battles with the Government and oil companies during the petrol price war, M Leclerc is shrugging off the risk of supply boycotts. He has indicated he is ready to go to court to force the car manufacturers to deliver.

The Leclerc announcement has been denounced as a "bluff" by car dealers representatives. His declared aim of selling 200,000 cars through his discount chain next year – amounting to about 10 per cent of the French car market – does seem unrealistically ambitious.

But in view of the success over petrol discounts of the Edouard and Michel duo (although brothers, the two Leclerc are rivals), car industry chiefs will be sleeping nervously while they see how the Michel Leclerc campaign unfolds.

Der Spiegel warned on Flick affair

By James Buchan in Bonn

WEST GERMAN judicial authorities warned at the weekend that they would prosecute the Hamburg news magazine, Der Spiegel, if it published excerpts from the indictment delivered last week of the five men at the centre of the so-called "Flick Affair."

The General Public Prosecutor's Office in Cologne said on Sunday that that it would examine Der Spiegel, which goes on sale today, to see if it contains excerpts from the indictment against the five men, including Count Otto Lambsdorff, the Economics Minister, who face court proceedings for corruption.

Der Spiegel, which was available in Bonn yesterday, gives a detailed breakdown of the alleged indictment, but at no point claims to be in possession of the document and largely confines itself to indirect speech.

Herr Erich Böhme, one of the two editors of the magazine, which has been bitterly attacked for its investigations into the affair said yesterday that the article had been carefully examined alongside the law and had remained within it.

Herr Gerhard Stoltenberg, the Finance Minister, yesterday accused Der Spiegel, and another Hamburg megazine, Stern, of one-sided revelations from the prosecutor's files and spoke of a serious transgression "against the rule of law."

More peace rallies in UK and W. Germany

BY MARGARET VAN HATTEM IN LONDON AND JAMES BUCHAN IN BONN

MORE THAN 20,000 anti-nuclear protestors demonstrated outside the Greenham Common in Berkshire yesterday as Mr Michael Heseltine, the UK Defence Secretary, stepped up his efforts to counter the propaganda of the peace movement.

The moves came in the wake of Saturday's first showing on British television of the film, The Day After, which depicts the aftermath of a Soviet nuclear strike on the U.S.

The film has again fuelled the nuclear debate in Britain but throughout many weekend radio and television appearances, Mr Heseltine insisted that possession of nuclear weapons by both sides in rough balance had kept the peace in Europe since 1945.

Meanwhile, in West Germany, some 10,000 people staged protests outside U.S. military installations during the weekend which marked the fourth anniversary of the Western Alliance's decision to deploy U.S. medium-range missiles in Europe.

Police used water-cannon and truncheons on Saturday to clear demonstrators from the approaches to a U.S. military depot in the Hausen suburb of Frankfurt, where the peace movement claims parts for the Pershing 2 missiles delivered to West Germany last month are being assembled. Six policemen were injured and 89 arrests were made after street battles.

Police also cleared demonstrators from the approaches to the U.S. military headquarters for Europe in Stuttgart and erected barricades round the U.S. base at Mutlangen in South Germany, where the first Pershing missiles are being stored.

In Britain, an opinion poll conducted last Friday and Saturday showed that 58 per cent of those questioned disagreed with Mr Heseltine's claims that the peace movement was a threat to the nuclear arms talks, while 52 per cent disapproved of the London Government's handling of the cruise missile issue.

It also showed that 64 per cent felt the West should make limited concessions to encourage the Soviet Union to resume arms negotiations.

However, Mr Heseltine accused the television company which had commissioned the poll of "re-organising the poll figures." On the basis of the arms talks which broke off only two weeks ago, 60 per cent of people supported cruise, he said.

Mr Heseltine accepted that the collapse of the talks made his task *more difficult but insisted that to* act on the poll's findings would lead to "government by opinion poll."

Defence and deterrence, Editorial comment, Page 12; Lessons of "The Day After," Page 13

Plan to revive UK gas gathering project

By Ian Hargreaves in London

AN ATTEMPT to win oil industry support for a £1.5bn ($2.15bn) gas gathering pipeline in the British sector of the North Sea will be made this week.

Gaffney, Cline, the energy consultants have spent several weeks making private presentations to 20 oil companies. They have now set a deadline of next weekend for a decision on whether the latest attempt to revive the gas gathering concept should go ahead.

At the same time, Mr Alick Buchanan-Smith, the UK Energy Minister, has been telling the oil companies informally that he is in favour of a gas gathering initiative, although he also insists the development is a matter for the private sector.

The Gaffney, Cline blueprint is for a 250-mile pipeline, linking the Bruce, Brae and T-Block developments to the St Fergus gas terminal. A short spur south of T-block would connect with a number of smaller fields.

The gas gathering scheme, abandoned in 1981, when the Treasury successfully outmanoeuvred Mr David Howell, then Energy Secretary, was for a 420-mile connection, running well to the south and north of the Gaffney, Cline pipeline. The Howell pipeline was costed at £2.7bn, but was opposed by the Treasury because 30 per cent of the money would have come from state-owned British Gas.

Gaffney, Cline has told the oil companies that several changes since 1981 have crucially improved the economics for a pipeline.

The most important is the consultants' judgment that a 50 per cent increase in the volume of exploration wells drilled since then has established 10 to 14 trillion (million million) cubic feet of gas and 500m barrels of gas liquids within the radius of the proposed line – total reserves equivalent to those believed in 1981 to lie within reach of the much longer pipeline.

Other factors are the improved tax position of shared pipelines since this year's Finance Act and the freedom now available to gas producers (under the Oil and Gas Enterprise Act) to sell supplies directly to customers other than British Gas.

For the oil companies, the bargaining position with British Gas and the price they can expect for supplies have always been crucial to any pipeline investment equation.

With British Gas currently negotiating in a range between 27p and 34p a therm for supplies from the Norwegian Sleipner gas field, Gaffney, Cline argues that the economics of a pipeline are highly favourable.

There are, however, some major uncertainties. Some oil companies prefer simply to develop their own gas lines; others believe that the line from Sleipner can be used as a core for a future network.

Massey in Vickers talks

Continued from Page 1

tive, would be in London this week. It is understood, however, that the visit was planned months ago and is not specifically designed to conclude a deal with Vickers.

Massey-Ferguson said it was well known that widespread talks about the future of Rolls-Royce Diesels and of the structure of the industry had been taking place. It was unable to comment on the prospects of a purchase by the Canadian-based group.

The British Government, however, has been kept in touch on the progress of the talks, although it *has not been a party to them and* has apparently made clear that any agreement is strictly between the parties concerned.

Rolls-Royce is thought to manufacture about 6,000 engines a year.

THE LEX COLUMN

Falling into the tender trap

It has been a miserable month for the tender. Offers for sale by Cable and Wireless, Dataserv and VG Instruments have all been substantially undersubscribed at the minimum tender price, leaving the underwriters to honour their commitments. While none of these tenders flopped as disastrously as the Britoil offer, taken together they were no advertisement for a method of selling equity which, over the past year or so, has become the accepted norm.

A string of failures is particularly unfortunate as it threatens to discredit a mechanism which, in volatile markets, has considerable inherent advantages over the traditional fixed price offer. In a tender, the vendor is still guaranteed through the underwriting process, a specific cash sum. The market, meanwhile, is in a position to place its own value on the equity, while the fact that a striking price is agreed at the last minute should, in theory at least, prevent the offer from being overtaken by events. The fault in many recent tenders lay not with the machinery itself, but with the engineers.

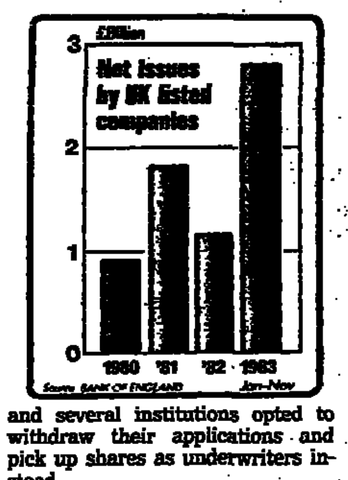
The tender is rarely of much value in secondary offerings. When an established market in a security already exists, it seems ludicrous to go through all the rigmarole of creating another one. For funding exercises like the recent BP and Cable sales, much the most satisfactory route is a placing with institutions. The cost is considerably lower, the discount to market value should be acceptable to the Government and the risk of embarrassment is substantially less.

Private investor

Yet the principal problem with the Cable sale was not the tender itself but the Treasury's determination to enjoy the best of all worlds. Even leaving aside the disappointing performance in the after-market, the BP tender effectively soured the private investor for whose benefit the tender had purportedly been laid on.

The minimum tender price in the case of BP was set at a narrow discount to the prevailing market price, applicants were temporarily deprived of interest on their cash by the immaculate official cheque clearing system and, most remarkable of all, the striking price was fixed at a premium to the market.

When the Government looked set to turn in a repeat performance with Cable, the stags stayed away



and several institutions opted to withdraw their applications and pick up shares as underwriters instead.

This kind of conundrum is not easy to resolve. There is no earthly reason why an offeror should set the striking price of his shares so low that the stags are guaranteed a handsome profit. Yet, if the private investor believes that he will be able to pick up equity as cheaply in the secondary market, he may be dissuaded from subscribing at all.

In that instance, the institutions will be inclined to keep their own applications to a minimum in the knowledge that, as underwriters, they will be allotted shares at the minimum price. Since they have entered the underwriting syndicate in the first place, they are presumably happy enough with that price and their only risk is in ending up overweight in the shares. Yet, in an equity market as institutionally dominated as London's, that risk is not great and the sub-underwriting fees of 1¼ per cent provide a fair protection against any losses on disposal.

In a case of this kind, the purpose of the tender – to enable the market to establish a price – will have been defeated. Neither the big institutions nor the smaller investors will have applied for – or been allotted – stock at a price which they were realistically prepared to pay.

This situation has arisen in large measure because the minimum tender price itself has often been set far too high. Instead of providing a last-resort safety net for the issuer, it has been seen as a base level very close to the likely realisation price. In case of companies such as Dataserv and VG Instruments, which are offered on a high earnings multiple, the minimum tender price is already implying a very rapid rate of profits growth.

If the minimum tender price is instead set at a substantial discount to the likely sale price, the chances of attracting subscriptions at a variety of prices will be considerably enhanced. The main stumbling block is clearly the vendor, whose principal priority is to limit his downside risk.

Underwriting

That obstacle is unlikely to be removed so long as underwriting commissions are regarded as a fixed fee for services rendered. In practice, they represent an insurance premium for the vendor and an option on equity investment for the underwriters. There seems little reason, therefore, why institutions should not accept a lower fee for what, in the case of a deep discount, *is evidently a smaller risk.*

The vendor, meanwhile, would be trading a greater ultimate risk for a lower premium. As a bonus, however, the chances of his shares being sold at a minimum tender price bearing little relation to actual demand would be considerably diminished, not least because the smaller underwriting cover would encourage institutions to apply for shares.

Few offerors would feel courageous enough to challenge the whole of the City's underwriting establishment for the sake of a single issue. The one vendor with sufficient muscle and vested interest to do so – and to dispense with underwriting altogether for that matter – is the Government. The Treasury will presumably be anxious to take *no chances with British Telecom,* but there seems little reason why it should not negotiate underwriting fees with, for example, Enterprise Oil. Any saving on underwriting could usefully be applied to television advertising, in the cause of broader share ownership.

The City must in any case be aware that the present underwriting system is under threat. No institution has yet developed the combination of capital resources and placing power needed to buy the whole of a major UK equity issue and distribute itself. The current spate of business combinations in the City, however, make that a realistic possibility before long.

The prospect of foreign securities houses bidding competitively for tranches of equity in blue-chip British companies must look extremely unattractive to domestic institutions, and perhaps even to the Government itself.

World Weather

		°C	°F			°C	°F			°C	°F			°C	°F
Ajaccio	-	—	—	Dubrovnik	C	10	50	Malaga	-	—	—	Salzburg	F	-1	30
Akrotiri	S	18	64	Faro	S	15	59	Malta	-	—	—	Seoul	S	2	36
Algiers	-	—	—	Florence	-	—	—	Manila	S	31	88	Singapore	R	27	81
Amsterdam	S	3	37	Frankfurt	F	1	34	Miami	S	22	72	Stockholm	F	-8	18
Athens	S	16	61	Funchal	-	—	—	Milan	Fg	-2	28	Strasbourg	C	1	34
Bahrain	S	28	82	Geneva	S	3	37	Moscow	C	-2	28	Sydney	F	22	72
Bangkok	S	31	88	Gibraltar	S	16	61	Munich	S	0	32	Taipei	C	20	68
Barcelona	-	—	—	Guernsey	C	6	43	Nairobi	S	27	81	Tangier	-	—	—
Beirut	C	18	64	Helsinki	S	-13	9	Naples	-	—	—	Tehran	-	—	—
Belgrade	C	5	41	H. Kong	S	23	73	New Delhi	S	22	71	Tel Aviv	C	16	61
Berlin	S	-4	25	Innsbruck	S	0	32	New York	C	12	54	Tenerife	-	—	—
Biarritz	C	8	46	Inverness	F	3	37	Nice	-	—	—	Tokyo	C	16	61
Blackpool	C	0	32	Istanbul	F	11	52	Oporto	R	7	45	Toronto	C	-8	18
Bordeaux	-	—	—	Jersey	C	5	41	Oslo	F	-8	18	Tunis	-	—	—
Brussels	S	3	37	Jo'burg	S	25	76	Paris	F	3	37	Valencia	-	—	—
Budapest	-	—	—	Las Palmas	-	—	—	Prague	-	—	—	Venice	-	—	—
B. Aires	S	26	78	Lima	S	23	73	Reykjavik	F	-1	30	Vienna	F	0	32
Cairo	C	17	63	Lisbon	F	15	59	Rio de J'o	C	33	91	Warsaw	-	—	—
Cape Town	-	—	—	Locarno	S	10	50	Rome	R	11	52	Zurich	F	1	34
Caracas	S	29	84	London	F	3	37								
Casablanca	-	—	—	Los Angeles	S	10	50								
Copenhagen	F	-2	28	Luxembourg	C	0	32								
Corfu	F	13	55	Madrid	F	8	46								
Dublin	C	5	41	Majorca	-	—	—								

Readings at mid-day yesterday:

C–Cloudy D–Drizzle F–Fair Fg–Fog H–Hail R–Rain S–Sun Sl–Sleet Sn–Snow T–Thunder

U.S. pressed on aid

Continued from Page 1

contracts placed by countries receiving loans from the parallel fund.

Herr Helmut Kohl, the West German Chancellor, has written to President Reagan stressing the importance of a bigger U.S. contribution.

Mrs Margaret Thatcher, the British Prime Minister, is being urged by Commonwealth leaders to make a similar personal initiative to bring her influence to *bear on Washington.*

At the Paris meeting at the weekend, the U.S. delegation, led by Mr Marc Leland, Under-Secretary at the U.S. Treasury, made clear no less than four times that Washington's position on IDA was not negotiable.

The U.S., which is holding out to contribute only 25 per cent of the agency's resources, against 27 per cent during the previous three-year period of IDA funding, wants to pay only $750m a year over the next three years.

This compares with $1bn sought by the other nations and *the World Bank, and* $945m which has actually been authorised by Congress for IDA funding during the past two fiscal years.

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SECTION II – COMPANIES AND MARKETS
FINANCIAL TIMES
Monday December 12 1983

INTERNATIONAL BONDS

Banks still major force in floating rate note market

BY MARY ANN SIEGHART IN LONDON

A VERITABLE merry-go-round is now in operation in the Eurodollar floating rate note market. As one new issue manager put it: "The banks are rushing in to lend money to people who are saving money by not borrowing from banks."

Or to put it more simply: banks are the major investors in FRNs. Attracted by the liquidity of the paper, they find floaters are a relatively risk-free way of building up their balance sheets in a world where good credits are increasingly hard to find.

Now non-bank borrowers have found that it can be cheaper to raise money through an FRN than to borrow directly from banks. Hydro-Quebec, for instance, issued a floater on Thursday at an all-in cost of 0.225 per cent over the six-month London interbank offered rate (Libor) for 10 years, which it will use to repay bank debt costing 0.50 per cent over Libor for seven years.

BHF Bank bond average		
Dec 9		Previous
98.155		98.233
High	1983	Low
102.017		97.699

Hydro-Quebec may have paved the way for more non-bank, non-sovereign borrowers in the floater sectors. But they may have to wait until more non-bank investors enter the market.

Some fund managers are already using it for cash management as an alternative to putting spare money in certificates of deposit. But the fact that Hydro-Quebec had to pay more generous terms on its issue than Creditanstalt-Bankverein shows that banks must still be the major investor force. In the fixed-rate market, where bank names have gone out of favour with investors, Hydro-Quebec might well have got away with finer terms than Creditanstalt. In the floating sector bank investors prefer to buy paper from their fellow banks.

The Creditanstalt deal also showed how tightly fees on floaters could be squeezed without affecting the performance of the bond. Total front-end fees were only ½ per cent but the spread over six-month Libor of ⅛ point was slightly more generous than on some recent issues. The bond was very warmly received, trading at a minuscule 0.15 per cent discount.

Last week saw some activity in the sterling bond markets with a £25m Eurosterling bond from Commerzbank and a £40m domestic debenture from Elf UK. The former was not a great success, launched into a market where sterling was sliding and gilts were weak.

The Elf issue was more interesting for two reasons. It had an eight-year maturity, compared with the usual 25 or 30 years for UK domestic bonds, and Elf had to pay a premium of at least ½ a point over the equivalent cost in the Eurosterling market.

Today should see the launch of a £50m bulldog bond from Spain. It will have a five-year life and will be priced by Samuel Montagu to give an expected yield of about 0.90 per cent over the equivalent five-year gilt; £30 per cent is to be paid now and the balance in March. Spain has been considering a sterling bond for a long time, but previously thought both margins and absolute rates were too high.

Secondary markets in fixed-rate bonds showed signs of Christmas slackness last week. Prices fell in dollars, D-Marks and Swiss francs, with the biggest losses in Germany, and turnover was very low.

CREDITS

Rush to complete loan for Brazil

BY PETER MONTAGNON, EUROMARKETS CORRESPONDENT, IN LONDON

BANKS ARE now rushing to complete Brazil's $6.5bn loan in time for a first disbursement before the end of the year.

Prof Antonio Delfim Netto, the Planning Minister, and Sr Affonso Pastore, central bank governor, are visiting Spain and the Middle East to rally banks that have not yet subscribed to the credit.

The International Monetary Fund has meanwhile reassured bankers that a parallel package of $2.5bn in loans from governments is in place. The government package is a precondition for any disbursement of the bank loan.

Later this week, the advisory committee of leading creditor banks, which is chaired by Citibank, will meet in New York amid expectations of a decision on disbursement. Brazil needs the money before the end of the year to eliminate debt interest arrears of more than $2.5bn, but the schedule has become tight, prompting speculation that bridging finance will be needed.

Leading creditor banks still, however, still display extreme distaste for more bridging finance.

If the disbursement schedule cannot be met, Brazil may therefore simply be left to reduce its arrears to less than the critical 90-day mark. That could be done from the country's existing resources, including the $1.8bn being made available today from a previous bank loan.

Mexico, meanwhile, begins talks today with its leading banks on a new loan of $3.5bn to $4bn to cover its needs for 1984. Margins on the loan are expected to be lower than on this year's $5bn credit, but Mexico is also believed to want a longer maturity of 10 years, with repayments beginning after five years.

That would help the country to avoid piling more repayment burdens on to a debt profile that is already bulging with maturing loans in the second half of this decade.

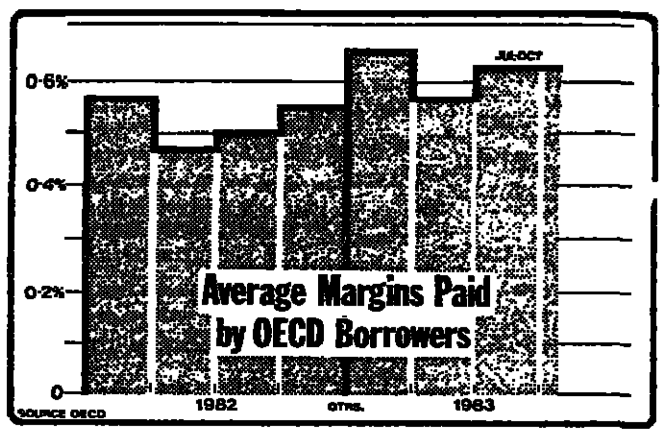
Last week, Yugoslavia's leading creditor banks agreed in principle to refinance some $1.6bn in medium and long-term debt falling due next year. That depends on Western governments also being prepared to refinance about $600m in maturing debt.

After this year's rather tortuous negotiations between the banks and Yugoslavia, talks for refinancing 1984 maturities might go fairly smoothly. Yugoslavia is expected to ask its bank creditors for a temporary freeze on repayments until the end of March to allow time for conditions to be worked out.

Banks are already talking of a seven-year refinancing instead of this year's six-year maturity and a small cut in margins, but one area of disagreement remains the question of Yugoslavia's need for new money.

The Yugoslav National Bank has about $700m in freely available foreign-exchange reserves and is forecasting a current-account balance of payments surplus of some $800m next year, compared with a deficit of $300m this year. Creditor banks reckon that means the country should be able to do without any fresh loans, but the International Monetary Fund is understood to be keen on an arrangement for some new money in case the country's cash-flow is tighter than expected.

Rather less progress was made last week on the Philippines' efforts to refinance $2bn in debt maturing up to the end of 1985, as well as to secure the extension of about $3.5bn in trade credits and new money totalling $1.6bn.



Discussions with commercial banks were again adjourned in mid-week to allow the country more time for talks with the IMF and government creditors. The U.S. and Japan are expected under the Philippines programme to provide about $600m in official finance, $200m in a temporary bridging loan.

Elsewhere, the fact that margins are beginning to drop for top-rated borrowers was shown yet again last week with the 10-year, £100m credit being led for Ireland by Allied Irish and Lloyds Bank International. Lenders will receive interest at a margin of ⅜ per cent over sterling money-market rates for the first three years, rising to ½ per cent thereafter.

Some bankers regard those terms as too fine for Ireland, which is not generally regarded as quite such a strong credit as France or Sweden, but there is already keen interest at lead manager level and the credit might be helped by a potential scarcity of Irish paper next year.

CURRENT INTERNATIONAL BOND ISSUES

Borrowers	Amount m.	Maturity	Av. life years	Coupon %	Price	Lead Manager	Offer yield %
U.S. DOLLARS							
Brown Boveri §	60	1995	12	4¼	100	SBCI, CSFB, UBS Secs.	*
IADB ††‡	200	2008	25	12¼	99.30	Salomon Bros.	12.341
Creditanstalt †‡	100	1994	10	⅛	100	Morgan Stanley, EBC, CSFB, Saml. Montagu, SBCI	–
Hydro-Quebec †‡	200	1994	10	⅛	100	CSFB	–
D-MARK							
Amca Intl. ‡	100	1991	8	8¼	100	Deutsche Bank	8.250
South Africa ‡	200	1991	8	8½	99¼	Deutsche Bank	8.634
MEGAL ‡	150	1994	9½	8¼	99¼	Dresdner Bank	8.364
SWISS FRANCS							
Chugai Pharm. **§‡	100	1988	–	2⅝	100	SBC	2.625
Meiji Seika **§‡	100	1989	–	2⅝	100	SBC	2.625
Okuma Machinery **§‡	50	1989	–	2⅝	100	Bque. Morgan Grenfell en Suisse	2.625
Lion Corpn. **§‡	50	1988	–	2¾	100	CS	2.750
Toko Inc. **§‡	35	1989	–	2¾	100	CS	2.750
Kirin Brewery **§‡	100	1989	–	2½	100	UBS	2.500
Brother Inds. **§‡	50	1989	–	2½	100	UBS	2.500
Gunze Sangyo **¶‡	20	1988	–	4	100	Swiss Volksbank	4.000
Hoxan Corpn. **§‡	20	1989	–	2¾	100	SBC	2.750
SCN ‡	100	1993	–	5¾	100	CS	5.750
Naka Inds. **‡	10	1988	–	6⅛	100	Bank Leu	6.125
Elec. Power Devt. Co. ‡	100	1993	–	5⅝	99½	UBS	5.692
World Bank **‡	300	1989	–	5¾	100	SBC	5.750
Tokyo Sanyo **§	150	1989	–	2⅞	100	SBC	*
Kurabo Inds. **§	50	1989	–	2⅞	100	CS	*
Iwatsu Electric **§	50	1989	–	2¾	100	UBS	*
Daiwa Danchi **¶	50	1989	–	4⅛	*	UBS	*
GTE Fin. !	100Ø	1994	–	9	–	Soditic	*
Eli Lilly Fin !	100Ø	1994	–	7	–	SBC	*
STERLING							
Commerzbank ‡	25	1990	6.04	11½	100	Hill Samuel, SG Warburg	11.500
NOR. KRONER							
Eksportfinans ‡	200	1989	5	12	100	Den norske Creditbank	12.000
ECUs							
EEC ‡	50	1993	6½	11	100	BBL, BNP, Sparekassen SDS	11.000
Soc. de Dev. Regional	20	1990	5	11⅛	*	BNP, Paribas, Soc. Gen., BBL, Nomura	*
Soc. de Dev. Regional	20	1995	10	11⅝	*	As above	*
EIB ‡	50	1989	5	10⅝	100¼	Kredietbank Intl., Sparekassen SDS, BBL, Soc. Gen. de Bque.	10.558
EIB ‡	25	1999	11.6	10	91	As above	11.270
YEN							
KEPCO **‡	5bn	1990	6.4	8.4	99.55	Daiwa Secs.	8.667
Sweden ‡	20bn	1993	9	7.7	99.75	Nomura Secs.	7.886

* Not yet priced. ‡ Final terms. ** Placement. § Convertible. † Floating rate note: coupon is spread over 6-month Libor. ¶ With warrants. Ø Minimum. ! Dual currency issue repayable in dollars. †† Registered with U.S. S.E.C. Note: Yields are calculated on AIBD basis.

INTERNATIONAL COMPANIES and APPOINTMENTS

U.S. BONDS

Bears fear that Fed cannot prevent rising rates

THE U.S. credit markets took another battering last week despite — or in some cases because of — what a veritable bevy of administration and Fed officials, together with a fair sprinkling of Wall Street's gurus, had to say.

Their views, which rarely coincided, swept through an already lethargic market like a whirlwind with nowhere to go. At the end of the week the long bond was ⅝ points lower at 100⅜ to yield 11.89 per cent. This despite the better than expected money supply numbers which sparked another half-hearted rally lifting the long bond from a five month low.

The relatively miserable state of the markets reflects a number of factors, including year-end pressures. But more importantly, like the speeches, it also reflects the current sharp debate about the course of the economy, interest rates and Federal Reserve Board policy.

The debate is taking place in an increasingly heated political environment — witness the latest House Committee attack on Paul Volcker and "Fed secrecy."

A thimble-sized guide to the views of a few of last week's major participants looks like this:—

Mr Paul Volcker, the Fed chairman, first reassured and then on reflection confused the markets by saying there had been no "major" change in Fed policy.

Fed Governor, Mr Henry Wallich, said a reduction of $100m in the Federal budget deficit would bring long-term rates down by 150 poins. In contrast Mr Donald Regan, the Treasury Secretary, said budget deficits were only one factor behind the current high level of interest rates but he declined to spsculate on the future course of rates.

Mr Albert Wojnilower of First Boston was less hesitant, dealing the markets a body blow by warning that the nature of the recovery is bringing the prospect of overheating ever closer and adding that he expects a gradual increase in interest rates followed by a "much bigger" increase.

Mr Preston Martin, the Fed's vice-chairman, rounded off the week by telling the markets they were paying too much attention to the weekly money supply numbers. M1, he said is playing "a minor role" in determining Fed policy.

What the markets detect behind the words is that the pace of the recovery and the political atmosphere in the run-up to the Presidential elections could have the Fed wedged between the proverbial "rock and a hard place."

While views sharply differ—and timing is seen as being particularly crucial — the bears on Wall Street have one current nightmare that runs something like this. If the economy overheats and the Fed does nothing, sooner or later inflation and long-term rates will rise. If the Fed eases, inflation fears will be rekindled—pushing rates higher — and, if the Fed firms to slow the economy, rates could move higher anyway, at least in the short term.

Next week brings another rash of economic statistics including November retail sales today and the producer price index and housing starts on Friday. These figures will be closely watched because of the perception that the Fed's policy-making Federal Open Market Committee will have the economy particularly in mind when it meets a week tomorrow.

Meanwhile the temporary lull in Treasury auctions is coming to a close. On Wednesday the Treasury is expected to announce the auction of $8bn in two-year notes for sale on December 21 followed by the announcement on Friday of the auction of $8bn of one-year notes.

Paul Taylor

U.S. INTEREST RATES (%)

	Week to Dec 9	Week to Dec 2
Fed funds wkly aver.	9.46	9.27
Three-month CDs	9.50	9.42
Three-month T-bills	8.96	8.95
30-year Treas. bond	11.89	11.82
AAA Utility	12.86	12.75
AA Industrial	12.70	12.50

Source: Salomon Bros. (estimates). In the week to November 30, M1 fell by $2.1bn to $517.1bn. In November M2 rose by $14bn to $2,176bn and M3 rose by $26.7bn to $2,588.7bn.

BHP forms trust to aid Queensland coal venture

BY MICHAEL THOMPSON-NOEL IN SYDNEY

INGENIOUSLY, Broken Hill Proprietary (BHP) is forming a unit trust that will make a A$341m (US$307m) take-over offer for Umal Consolidated.

Umal owns an important stake in the Queensland coal mine BHP is acquiring as part of its US$2.4bn acquisition of the Utah International resources group from General Electric of the U.S.

Under the plan, which has Umal's blessing, the trust will hold up to 22 per cent of the consortium BHP is forming to handle Utah's Queensland mines.

Non - Australian resource assets being acquired in the Utah deal will belong wholly to BHP.

For tax reasons, Umal has been under pressure from some shareholders—led by merchant bank BT Australia—to transform itself into a trust for some time.

BHP will offer Umal shareholders 310 A$1 units in the new Queensland Coal Trust for every 100 Umal shares held. If acceptances reach 90 per cent the offer will become 320 units per 100 shares. The offer values each Umal share at A$3.10, against Friday's closing price of A$2.70. The offer is conditional.

It now appears that ownership of the new Queensland consortium being formed by BHP will be as follows: BHP, 35-40 per cent; GE, 20-25 per cent; the Queensland Coal Trust, up to 22 per cent; Mitsubishi Development, 12 per cent, and the Australian Mutual Provident Society, 7 per cent. The latter two already hold similar stakes in the existing Utah coal consortium.

Finance for the Utah deal—easily the biggest acquisition ever by an Australian company—has already been arranged.

● Australia's decision to float the dollar from today may well have been precipitated by Thursday's application by Elders-IXL to bring A$700m into the country. Mr John Elliott, Elders' managing director, said yesterday that his company had applied to the Reserve Bank of Australia to bring in the money to help fund its A$930m takeover bid for Carlton United Breweries (CUB), the country's largest brewer.

On Friday, foreign currency dealings were suspended, causing Elders momentary concern, before the authorities announced that the local dollar would be floated from to-day. Mr Elliott said he was "delighted" with the float, which would "bring Australia into the 20th century when it comes to money."

Cub owns 49.4 per cent of Elders-IXL. On Friday Elders launched an on-market buying spree, at A$3.82 per CUB share, following an earlier offer of six Elders shares plus A$12.20 cash for every 10 CUB shares.

By the close of trading on Friday, which saw a record national sharemarket turnover of more than A$200m, Elders had accumulated just under 35 per cent of CUB.

Elders is expected to gain formal control of CUB early this week.

Yesterday, breaking more than a week's silence, Mr Elliott spoke of a "friendly merger" between CUB and its former subsidiary.

CUB's management has been criticised for not reacting to Elders' foray, but yesterday's remarks by Mr Elliott made it clear that a merger had been on the cards for more than a year.

Bulldog bond for Trinidad and Tobago

By Peter Montagnon

Trinidad and Tobago is planning to launch a £50m five-year bulldog bond on the British market early in the new year, Mr Kenneth Valley, a senior Finance Ministry official, said in London over the weekend.

Mr Valley said he hoped to obtain a margin of between 125 and 150 basis points over the equivalent gilt-edged stock for the borrowing. This compares with the 90-point margin expected on today's £50m five-year issue for Spain.

The Trinidad issue is, however, already somewhat controversial as the Bank of England tends to frown on the pre-announcement of issues in the bulldog market. Trinidad is not particularly well known to bond investors, but government officials are hoping that the market will recognise the country's economic record.

Although Trinidad's foreign exchange reserves have fallen this year, they still stand at about $2.5bn which represents 10 months of imports.

Credit extension for Eastern Airlines

BY TERRY DODSWORTH IN NEW YORK

EASTERN AIRLINES, the financially troubled U.S. carrier, has reached agreement on the extension of credit lines from its major bankers following its pace-setting wage reduction package which is expected to slash costs by around $370m next year.

The salary deal will mean pay reductions of 18 per cent for most of the company's 37,500 workforce, with the pilots, who currently earn up to $105,000 a year, dropping by 22 per cent.

This settlement has apparently persuaded the company's 67 leading institutions that it should be able to pull back into profits over the next 12 months. "They had refused to grant us further waivers on our loan covenants unless we could show that we should not lose money next year," the company said. In the first nine months of this year Eastern lost $129m.

In addition, the airline has received the go ahead from a consortium of French and West German banks for the delivery of four European Airbus A300s, which were being held up pending the reorganisation. Purchase of the aircraft, which is part of a wider ranging upgrading of Eastern's fleet, is being largely financed with export credits, and delivery has been made contingent on Eastern hammering out a lower cost structure.

Eastern has been one of the hardest hit of the U.S. airlines during the recession, partly because of heavy debts built up to finance its ambitious aircraft acquisition programme. Over the last 12 months it has been heavily dependent on credit lines extended by its lending institutions, including a $400m facility from a consortium of 28 banks, which have now agreed to continue their support.

The contract with the unions will have to go to shareholders for approval since it also involves a heavy dose of worker participation. In recompense for the salary handbacks, the workforce is to be given new shares which will eventually amount to 25 per cent of Eastern's equity, making the employees the biggest voting block.

At the same time, the union has won concessions on worker representation on the Board and in key management decision making. However, shareholders, who have not received dividends since the late 1970s are expected to concur in the settlement.

INTERNATIONAL APPOINTMENTS

Restructuring at ANZ Bank

ANZ BANK has made some major changes to its executive structure. **Mr A. G. Kilpatrick**, at present chief general manager and a director, becomes deputy managing director. **Mr W. J. Bailey** and **Mr R. A. D. Nicolson** become chief general managers—Mr Bailey will be responsible for domestic banking and management services and Mr Nicolson for corporate and international banking and Esanda. ANZ is upgrading its top posts in New South Wales and **Mr B. B. Dickinson**, general manager funds management, will assume leadership of its banking operations there as general manager New South Wales. He will be supported by **Mr R. C. Tuxford** as assistant general manager domestic banking (returning to New South Wales from state manager Western Australia) and **Mr R. N. Fenton** as assistant general manager corporate banking (from the bank's corporate banking headquarters). Mr Dickinson will replace **Mr A. G. Wiltshire**, assistant general manager and state manager, who is retiring soon. ANZ is establishing a division under the leadership of **Mr D. (Jim) Nicolson**, general manager branch banking, to incorporate its fund management function and to care for its expansion into the broader area of financial services. Mr Nicolson will be general manager finance.

● HONEYWELL has appointed **Mr James J. Verrant** to the new position of associate group vice-president, information systems international, from January 1. Mr Verrant will have responsibility for all information systems operations in Canada, Mexico, Australia and the Far East. Mr Verrant is vice-president and general manager of Honeywell's process management systems division in Phoenix, Ariz., a position he has held since 1980. **Mr Edward T. Hurd** will succeed Mr Verrant as vice-president and general manager of process management systems division. Mr Hurd, who is currently vice-president of marketing for the division, has been with Honeywell since 1962.

● SIKORSKY AIRCRAFT has named **Mr Ray D. Leoni** vice-president research and engineering, from his previous position as vice-president—engineering and manufacturing engineering. In this new position, Mr Leoni assumes increase responsibilities for all aspects of engineering, research and development, and manufacturing engineering for Sikorsky, a United Technologies division.

● NATIONAL CAN CORP chairman **Mr Robert Stuart** is resigning, but will remain chairman of the finance committee and a member of the executive and corporate development committees. Chief executive officer and president **Mr Frank Considine** has taken on the additional position of chairman.

● MASSEY-FERGUSON has appointed **Mr Maurice Strong**, chrairman of Canadian Development Investment Corp, a director. He represents the Canadian Government. The Canadian Government has had the right to elect a director to Massey's board since its 1981 agreement with the company, but has not chosen to exercise that right before now.

● **Mr John R. Dowdle**, senior vice-president of BOOZ ALLEN AND HAMILTON, has been named regional manager of the company's Middle Eastern operations. Mr Dowdle, formerly Booz Allen's Western U.S. regional manager, will be responsible for operations in Saudi Arabia, the Gulf, the Near East, Egypt and Pakistan.

● **Mr Christopher J. N. Robinson** has been appointed senior vice-president of REED STENHOUSE INTERNATIONAL INC, a division of the international insurance brokerage company Reed Stenhouse Inc. Mr Robinson serves as foreign brokerage manager, with responsibility for the development and U.S. co-ordination of multinational accounts headquartered outside North America. He is based in the New York office.

● The Bank of England has seconded **Mr Robin P. Webster** to the BAHRAIN MONETARY AGENCY as adviser on monetary affairs, initially for two years. He succeeds **Mr J. E. Noakes**, who left Bahrain at the end of last year to regulate the banking system in the Isle of Man.

● **Mr Richard S. Hickock** has been elected to the board of MARSH AND McLENNAN COMPANIES. He is chairman emeritus of Main Hurdman, certified public accountants.

● **Mr Donald J. Selinger**, who served for 16 years with Chemical Bank, has been appointed general manager of BAHRAIN INTERNATIONAL BANK (BIB) in succession to **Mr Yves Bernard**. BIB is an offshore bank launched in Bahrain last year by a group of predominantly Kuwaiti investors. It is capitalised at US$180m.

● AL-UBAF ARAB INTERNATIONAL BANK, based in Bahrain, has appointed **Mr Patrick Mason** its general manager from January 1. Mr Mason is deputy general manager of UBAF Bank in London. **Mr Abdel Latif Benani**, who set up the Bahrain OBU as the 100 per cent Arab-owned member of the UBAF Group, has been appointed general manager of Union de Banques Arabes et Francaises (UBAF) in Paris.

● A management rehuffle is being made at the ARAB ASIAN BANK GROUP on January 1. **Mr A. J. Lawrence** becomes deputy chairman and senior adviser to the board of the group's London deposit-taker, C. E. Coates. His previous position of managing director there is being taken over by **Mr Tawfiq el Sawy**, deputy managing director for corporate finance at the bank's Bahrain OBU. **Mr Karim Helal**, managing director of Arab Asian in Bahrain, is to assume responsibility for a new venture, International Financial Services Group SA.

● TRANS-ARABIAN INVESTMENT BANK (TAIB) Bahrain, has promoted **Mr David Carpita** to senior vice-president for a newly-formed Gulf division, with responsibility for all lending and syndication activities within the Gulf Co-operation Council (GCC) states. **Mr A. Scott Johnson** has joined TAIB from First Bank Minneapolis to co-ordinate the business generated from the investment bank's offices in New York, Cairo and Hong Kong and its subsidiary in Geneva.

FT INTERNATIONAL BOND SERVICE

U.S. DOLLAR STRAIGHTS	Issued	Bid	Offer	Change on day	Change on week	Yield
Amex O/S Fin. 10⅝ 90	100	93½	94	−0⅛	−0⅛	11.67
Australia Com. 11¼ 90	100	100½	101	−0¼	−0⅛	11.07
Australia Com. 11½ 95	300	95¾	96¼	−0⅛	−0⅜	12.14
Australia Com. 11⅝ 98	100	96⅛	96⅞	−0⅜	−0⅜	12.11
Bk. of Tokyo Hd. 11 90	100	93⅞	94⅜	−0⅛	−0½	12.38
Brit. Col. Hyd. 10⅞ 88	200	95⅞	96⅜	−0¼	−0⅜	11.41
Britoil Fin. 11⅞ 90	125	99⅛	99⅝	−0⅛	−0⅜	12.00
Canada 10⅞ 88	500	98¼	98⅜	−0⅛	−0⅜	11.27
CCCE 11⅜ 97	100	92¼	92⅜	−0⅛	−0⅜	12.93
CCCE 12⅜ 95	75	98¼	98¾	−0⅜	−0½	12.86
CIBC 11 90	75	†92¼	92⅜	0	−0⅜	12.75
Citicorp O/S 10⅜ 90	100	90⅝	91⅛	0	−0⅜	12.49
Citicorp O/S 11⅜ 90	100	96⅜	97⅛	+0⅛	+0⅛	12.40
Cr. Suisse Bah. 10½ 90	150	97⅞	98⅜	−0½	−1	10.93
Den. Norsk Crd. 11⅛ 93	50	92½	93	−0⅜	−0½	12.57
ECSC 11⅞ 90	75	98½	99	−0⅜	−1	12.12
EDF 11⅜ 93	100	91¼	91⅜	−0⅛	−0⅜	12.69
EEC 11 87	350	98	98½	−0¼	−0½	11.57
EIB 10⅜ 93	200	90⅛	90⅞	−0⅜	−1⅛	12.46
EIB 11 91	125	94	94½	−0⅜	−1	12.21
Eksportfinans 11½ 90	100	96	96½	−0⅜	−0⅛	12.33
Electrolux 10½ 90	50	92⅞	93⅜	+0⅛	+0⅜	12.11
Ensearch Fin. 11⅝ 93	100	95⅜	95⅜	−0¼	−0⅜	12.43
Fuji Int. Fin. 10⅞ 90	100	92	92½	0	−0½	12.67
GMAC O/S Fin. 11⅜ 90	100	98⅞	99⅜	−0⅛	−0¼	11.55
Honeywell Int. 10⅜ 90	100	95⅛	95⅞	−0⅛	−0⅜	11.74
Ind. Bk. Japan 10⅞ 88	100	96⅜	97¼	−0⅛	−0¼	11.75
Ind. Bk. Japan 11⅞ 91	100	97¼	97⅜	−0⅛	−0½	12.38
ITT Finan. 11½ 89 WW	125	97⅝	98⅛	−0¼	−0⅛	12.02
Japan Air Lines 10⅞ 98	42	91	91½	−0⅜	−0⅜	12.17
Japan Air Lines 11 93	75	93⅞	94⅜	−0¼	−0½	12.04
J. C. Penney 11⅞ 90	100	99⅞	100⅜	−0⅜	0	11.88
J. P. Mrgn. 11⅜ 90 WW	150	96⅝	97⅛	−0⅜	−0⅜	12.05
Levi Strauss Int. 11 90	75	95½	96	−0⅜	−0⅜	11.94
LTCB 10⅜ 90	100	91⅞	92⅜	−0¼	−0⅜	12.56
LTCB 12½ 90	85	100⅜	100⅞	−0⅛	−0⅜	12.39
Merrill Lynch 10⅜ 90	200	93½	94	−0⅛	−0¼	12.05
Mitsubishi Cpn. 10½ 90	100	92⅞	93¼	−0¼	−0⅜	12.10
Mitsubishi Fin. 11⅛ 90	100	94⅜	94⅞	−0⅛	−0⅜	12.59
Nippon Credit 11 90	100	92⅞	93⅜	−0¼	−0⅜	12.59
Nippon Credit 11⅞ 90	100	96½	97	−0⅜	−0½	12.60
Ontario Hydro 10¼ 90	250	93⅛	93⅝	0	0	11.74
Ontario Hydro 11⅜ 90	200	100⅛	100⅝	−0⅛	−0⅛	11.65
Pacific Gas & El. 12 91	75	101½	102	−0⅛	−0½	11.63
PK Banken 12 90 WW	75	96¼	96¾	−0½	−0⅜	12.78
Quebec Hydro 11⅞ 92	100	†97⅛	97⅜	0	0	11.97
Saskatchwn. Pr. 10⅜ 90	125	95⅛	95⅝	−0⅛	−0½	11.81
Sears O/S Fin. 11½ 88	125	100⅜	101¼	−0⅜	−0⅛	11.22
Sears O/S Fin. 11⅝ 93	150	97½	98	−0⅜	−0⅜	12.01
S. Cal. Edison 10½ 90	75	94⅜	95⅜	−0¼	−0⅜	11.62
Sumitomo Fin. 10⅞ 90	100	92	92½	−0¼	−0⅛	12.68
Texaco Capital 9⅜ 90	150	90⅝	91⅛	−0¼	−0⅜	11.85
Texaco Capital 10½ 93	200	93⅞	94⅛	−0⅛	−0½	11.54
UBS 10 88	100	97⅝	98⅛	−0⅛	0	10.59
World Bank 11⅛ 88	100	98⅛	98⅝	−0½	−0⅜	11.85
World Bank 11⅜ 90	200	95⅝	96⅛	−0⅜	−0⅜	12.15
World Bank 11½ 90	150	96⅝	97⅛	−0½	−1	12.16
World Bank 12 93	200	98⅝	99¼	−0¼	−0⅜	12.16

Average price changes... On day −0¼ on week −0½

DEUTSCHE MARK STRAIGHTS	Issued	Bid	Offer	Change on day	Change on week	Yield
Air Canada 7⅜ 93	100	98⅞	99½	−0⅜	−1⅛	7.50
Arab Bnkg. Con. 8 88	100	96½	96¾	−0⅜	−0⅝	9.09
Asian Dev. Bk. 8½ 93	200	99⅛	99⅝	−0⅜	−0½	8.59
Austria, Rep. 7⅜ 89	100	99⅝	100⅛	+0⅛	−0¼	7.61
Austria, Rep. 8 93	100	100⅞	101⅜	−0⅛	−0⅜	7.82
Avon Int. Fin. 7½ 93	100	100⅝	101⅛	−0⅜	−0⅜	7.36
Barclays O/S 8⅛ 98	250	97⅞	98⅜	−0⅜	0	8.35
Beatrice Foods 7⅜ 93	130	103½	103⅞	−0½	−0⅛	7.23
BFCE 8¼ 90	150	100½	101¼	0	+0⅜	8.06
Dresdner Fin. 4 90 WW	250	107	107⅝	0	−1⅛	2.75
Dresdner Fin. 4 90 XW	250	92⅝	93⅜	+0⅛	−0⅛	7.36
ECSC 8 90	160	99⅝	100⅛	−0½	−0⅝	8.01
EEC 8⅛ 93	250	98⅜	98⅞	−0⅜	−2⅛	8.45
EIB 8 93	200	97½	98	−1	−1	8.34
Eurofima 7½ 90	100	100⅜	100⅞	+0⅛	−0½	7.39
Europarat 8⅛ 93	150	99⅜	99⅞	−0¼	−0⅛	8.32
Finland Rep. 8 90	150	97⅞	98⅜	−0⅜	−0⅜	8.36
Int. Standard Ele. 7⅜ 93	100	102⅜	103	−0⅛	−0⅜	7.35
Ireland 8⅞ 91	150	99⅝	100⅛	−0½	−0⅛	8.61
Japan Devt. Bk. 7½ 90	100	101½	102⅛	+0⅞	+0⅞	7.14
LTCB 8 90	100	100⅛	100⅞	−0⅛	−0⅜	7.86
Renault Accptnce. 8 90	150	98	98½	−0⅛	−0⅛	8.34
SDR France 7⅞ 93	100	96¾	97¼	−0⅜	−0⅜	8.33
S. African Tran. 8⅜ 90	100	98⅜	99¼	0	−0⅜	8.44
World Bank 7½ 90	250	97⅝	98⅛	0	−0⅛	7.89
World Bank 7⅞ 89	300	99⅜	99⅞	−0⅛	−0⅜	7.97

Average price changes... On day −0¼ on week −0⅛

SWISS FRANC STRAIGHTS	Issued	Bid	Offer	Change on day	Change on week	Yield
Amex O/S Fin. 7⅜ 91	57	78½	78⅝	−0⅜	−1	11.49
Bank of Tokyo 6 91	100	102	102⅜	0	−0½	5.65
Bergen, City of 5⅜ 95	40	†100	100½	+0⅛	+0⅛	5.72
Denmark 6⅛ 91	100	101	101¼	−0¼	−0⅞	6.18
EEC 6 93	100	101	101¼	−0½	−0⅜	5.84
Europarat 6¼ 93	100	98½	98⅜	0	−0½	6.31
Ind. Fd. Finland 6⅜ 91	40	†101½	102	0	0	5.96
Int.-Am. Dev. Bk. 6 93	100	98½	98⅜	+0⅛	+0¼	6.19
Ireland 6½ 93	80	99½	99⅜	0	+0⅜	6.55
Japan Dev. Bank 5⅞ 93	100	102½	102⅜	+0⅛	−0⅛	5.52
Jap. Highway P. 5⅜ 91	100	99¾	100	0	−0¼	5.64
Kansai Elec. Pwr. 6 91	100	102	102⅜	−0¼	+0¼	5.60
Kawasaki Steel 6⅛ 91	100	101	101½	+0½	0	5.93
Manitoba Prov 5½ 93	100	100⅜	101	0	+0⅜	5.38
Mont Blanc Tunl. 6⅛ 93	35	†102	102½	−0⅛	−0⅞	6.06
Mont Isa Fin. 6 93	100	102⅜	102⅜	+0⅛	+0⅛	5.65
Mt. Bk. Denmark 6⅛ 91	80	99¼	99½	0	0	6.35
New Brunswick 5⅜ 93	100	101⅜	102	0	0	5.60
Nippon Tel. & T. 5⅜ 93	100	102	102¼	−0⅛	−0⅛	5.47
Nisshin Steel 6¼ 91	100	100½	100⅜	+0¼	+0½	6.14
Osterr. Post 6⅛ 91	100	102	102¼	−0⅛	0	5.76
Quebec Province 5⅜ 93	100	99⅜	100	+0⅛	+0⅛	5.64
Shikoku Elec. Pwr. 6 91	100	101⅞	102⅛	−0⅛	0	5.68
Sumitomo Hvy. I. 6 91	100	101⅛	101½	+0½	+0½	5.77
Tokyo Elec. Pwr. 5⅞ 91	100	102	102⅜	−0½	−0⅛	5.53
Trizec Corpn. 6½ 93	100	100	100⅜	0	+0⅛	6.10

Average price changes... On day 0 on week 0

YEN STRAIGHTS	Issued	Bid	Offer	Change on day	Change on week	Yield
Australia 8⅜ 92	15	106¼	107	+0⅛	+0⅛	7.56
EIB 8⅛ 92	15	103⅜	103⅞	+0⅛	+0⅛	7.66
Int.-Am. Dv. Bk. 7⅞ 93	15	100⅜	101	+0⅛	+0⅛	7.78
New Zealand 7⅜ 89	15	103	103½	+0⅛	+0¼	6.91
World Bank 7⅜ 93	20	100⅜	100⅜	0	+0⅛	7.56

Average price changes... On day +0⅛ on week +0⅛

OTHER STRAIGHTS	Issued	Bid	Offer	Change on day	Change on week	Yield
Farm Credit 12¼ 90 C$	75	†100¼	100⅜	−0⅜	−0⅜	12.11
Norcen 12⅜ 93 C$	60	†96½	97	−0⅜	−0⅜	13.33
TD Mt. Cpn. 12½ 88 C$	40	†100⅜	101¼	−0⅛	−0⅜	12.17
Quebec Hyd. 12⅜ 93 C$	50	†101¼	101⅞	+0⅜	−0½	12.46
Royal Trstco. 12⅜ 88 C$	50	†101½	102	+0⅜	+0⅛	12.12
World Bank 12⅛ 90 C$	75	†100⅛	100⅝	−0⅛	−0⅜	12.15
Xerox Canada 12 88 C$	40	†102½	103	+0⅜	+0⅛	11.18
EIB 11⅛ 93 ECU	50	100⅛	101⅛	+0⅛	+0½	10.99
Genfinance 11 90 ECU	60	98⅞	99⅜	+0⅜	−1	11.25
Algemene Bk. 8⅜ 88 Fl	150	102⅝	103⅛	+0⅛	+0⅛	7.97
Bk. Mees Hope 9 88 Fl	75	103	103½	0	0	8.13
Elec. Sup. Bd. 8⅜ 88 Fl	75	97⅛	97⅝	0	0	9.43
PHP 8⅜ 88 Fl	50	101⅞	102⅜	0	0	8.17
Sw. Ex. Cred. 7⅜ 88 Fl	100	96⅛	96⅝	−0⅛	+0⅛	8.78
World Bank 9 88 Fl	100	103⅛	103⅝	0	0	8.09
OKB 14 88 FFr	400	101½	102½	+0⅛	+0⅛	13.03
Solvay et C. 14⅜ 88 FFr	200	102⅞	103⅛	0	+0⅛	13.24
BFCE 11½ 88 £	50	98⅞	99⅜	0	−0⅜	11.88
British Oxyg. 11⅜ 91 £	50	99⅞	100⅜	0	0	11.68
CEPME 11⅞ 95 £	35	101½	102⅛	+0⅛	+0⅛	10.97
Ciba-Geigy Int. 6⅞ 93 £	25	98	99¼	−0⅜	+0⅛	6.94
EEC 11⅞ 91 £	50	100⅜	101½	−0⅜	−0⅜	11.62
EEC 11⅞ 93 £	50	100⅞	101⅜	0	−0⅛	11.64
Fin. for Ind. 10½ 90 £	20	95	95¾	+0⅛	−0⅜	11.52
Finland Rep. 11⅞ 88 £	50	100⅜	101⅛	0	−0⅜	11.63
Gen. Elec. Co. 12½ 89 £	50	103⅜	104⅜	−0⅛	−0⅛	11.34
III 10⅜ 93 £	25	95	95⅜	0	−0½	11.55
III 11½ 91 WW £	50	†98⅛	100⅛	0	−0⅜	11.55
Mort. Bk. Fin. 11⅜ 89 £	15	98	99	0	−0⅜	12.11
Norsk Hydro 12 90 £	30	100½	101¼	−0¼	−0⅞	11.77
Sweden 11¼ 93 £	50	97⅞	98⅜	0	−0⅜	11.54
Sw. Ex. Cred. 11⅜ 88 £	30	98⅜	99⅜	+0⅛	+0⅛	11.50
World Bank 11⅜ 88 £	100	98⅜	99⅜	−0⅜	−0⅛	11.38
Eurofima 10 91 LuxFr	500	99⅛	100¼	0	−0⅜	10.04
Europarat 10⅜ 93 LuxFr	600	100⅜	101⅛	−0⅜	−0⅜	10.62

FLOATING RATE NOTES	Spread	Bid	Offer	C.dte	C.cpn	C.yld
BFCE 5⅛ 88	0⅛	99⅝	99⅞	20/1	10.18	10.20
Caisse Nat. Tele. 5⅜ 90	0⅛	99¼	99½	21/4	10	10.06
CCF 5¼ 95	0¼	99⅜	99⅝	7/4	9.94	9.99
CCF 5⅛ 98	0¼	99⅜	100	24/2	10.19	10.20
CEPME 5⅜ 88 WW	0¼	99⅞	100⅛	3/3	10.31	10.31
CEPME 5⅜ 92	0⅜	99⅞	100⅛	10/12	10½	10.50
Chemical NY 5⅛ 94	‡0⅛	100⅛	100⅜	23/12	10	9.98
CNCA 5¼ 95 XW	0¼	99½	99⅜	7/6	10½	10.54
CNCA 5¼ 97	0¼	99½	99⅜	24/3	10.31	10.35
CNT 5¼ 91	0¼	99⅛	99⅝	6/5	10.19	10.24
Credit Foncier 5⅛ 93	0¼	99½	99⅜	6/4	10	10.04
Credit Lyonnais 5⅛ 94	0⅜	99⅜	99⅜	5/1	10.31	10.35
Credit Lyonnais 5⅜ 97	0¼	99⅜	99⅞	1/4	10	10.04
Denmark 5⅛ 90	0¼	99⅛	99½	13/4	10	10.06
Dresdner F. 5⅜ 93 XW	0⅛	99⅞	100⅛	19/4	9.94	9.94
EDF 5⅛ 95 XW	0⅛	99⅜	100	10/2	11⅛	11.39
EEC 5 90	0⅛	99⅞	100⅛	6/1	10.19	10.19
First Interstate 5⅜ 96	0⅜	99¼	99½	6/3	5⅛	5.28
GZB 5⅛ 96	0⅜	99½	99⅜	29/5	5⅛	5.27
Hispano 5⅛ 95	0⅜	98	98⅜	20/4	10	10.19
NZ Steel Dev. 5⅜ 92	0⅜	99⅞	100⅛	22/12	10⅛	10.24
Societe Gen. 5⅜ 90 XW	0⅜	99½	99⅜	9/5	10.31	10.35
Societe Generale 5⅛ 95	0¼	99⅜	100⅛	1/3	10.94	10.94
Sweden 5⅛ 93	0¼	100⅛	100⅜	3/2	11.19	11.16
Sweden 5⅜ 2003	0⅜	99⅜	99½	17/5	6⅛	5.28

Average price changes... On day 0 on week −0½

CONVERTIBLE BONDS	Cnv. date	Cnv. price	Bid	Offer	Chg. day	Prem
Bridgestone Tire 5½ 96	3/82	470	124⅜	125⅛	−2⅛	−1.48
Canon 7 97	7/82	690.2	237⅜	239⅜	−0⅜	3.36
Daiwa Sec. Co. 5½ 98	10/83	481.8	96⅞	96⅞	−0⅜	−0.91
Fanuc 3⅜ 98	1/84	9142	115	116	+0½	7.43
Hitachi Cable 5⅛ 96	2/82	515	106⅜	107⅞	+0½	3.07
Honda Motor 5⅜ 98	6/83	884	125½	128½	−1⅜	1.69
Honda Motor 5½ 97	3/83	759.6	146½	147⅜	−1⅜	1.38
Konishiroku Ph. 4 98	10/83	673	98⅛	99⅛	−0½	5.89
Kyowa Hakko 6⅛ 97	2/83	762	110⅜	112⅞	−0⅜	12.62
Minebea Co. 5½ 98	5/83	867	108⅛	109¼	−1⅜	0.60
Mitsubishi Elec. 5⅛ 98	6/83	396	108⅜	109⅜	−0⅛	4.44
Nippon Electric 5⅛ 97	2/82	765.9	174⅞	176⅝	−2⅛	0.52
Nippon Oil Co. 5½ 98	4/83	864	113⅜	114⅞	−0⅜	5.30
Nissan Motor 5⅛ 98	4/83	700	106⅜	107⅜	−1⅛	−0.17
Olympus Optic. 6⅛ 97	12/82	1167	106½	107¼	−0⅛	4.05
Orient Finance 5⅛ 97	3/82	927.2	91⅜	92⅞	−0⅛	11.76
Orient Leasing 5⅛ 98	6/83	2880	87⅜	88⅜	−0⅛	3.03
Secom 5 98	11/83	2920	136⅜	138⅜	−1⅛	0.38
Yamaichi Sec. Co. 5 98	8/83	449.5	95⅜	97⅛	0	−1.41
Yamanouchi Ph. 4 90	10/83	1808	98½	99⅜	+0⅛	12.30
Bridge Oil 4⅜ 93 SwFr	3/84	3.43	100⅞	102½	−0½	28.85
Settsu Ppr. 3⅜ 93 SwFr	9/83	716	100⅜	102⅜	0	12.86
Asics 5 92 DM	12/83	520	108⅜	109½	+0⅛	9.41
Konishiroku 6⅜ 88 DM	6/82	616	121	122	+0⅛	0.82
Sum Realty 6¼ 92 DM	2/83	365	127⅜	128⅜	+0⅛	−3.76

EUROBOND TURNOVER
(nominal value in $m)

	Cedel	Euro-clear
U.S. $ bonds		
Last week ...	5,294.2	9,813.3
Previous week	4,610.8	10,511.7
Other bonds		
Last week ...	1,128.0	957.4
Previous week	1,533.0	1,486.4

* No information available—previous day's price.

† Only one market maker supplied a price.

STRAIGHT BONDS: The yield is the yield to redemption of the mid-price; the amount issued is in millions of currency units except for Yen bonds where it is in billions. Change on week= Change over price a week earlier.

FLOATING RATE NOTES: Denominated in dollars unless otherwise indicated. Coupon shown is minimum. C.dte=Date next coupon becomes effective. Spread=Margin above six-month offered rate (‡ three-month; § above mean rate) for U.S. dollars. C.cpn=The current coupon. C.yld = The current yield.

CONVERTIBLE BONDS: Denominated in dollars unless otherwise indicated. Chg.day= Change on day. Cnv. date=First date for conversion into shares. Cnv. price=Nominal amount of bond per share expressed in currency of share at conversion rate fixed at issue. Prem=Percentage premium of the current effective price of acquiring shares via the bond over the most recent price of the shares.

The list shows the 200 latest international bonds for which an adequate secondary market exists. The prices over the past week were supplied by: Kredietbank NV; Credit Commercial de France; Credit Lyonnais; Commerzbank AG; Deutsche Bank AG; Westdeutsche Landesbank Girozentrale; Banque Generale du Luxembourg SA; Banque Internationale Luxembourg; Kredietbank Luxembourg; Algemene Bank Nederland NV; Pierson, Heldring and Pierson; Credit Suisse/Swiss Credit Bank; Union Bank of Switzerland; Akroyd and Smithers; Bank of Tokyo International; Blyth, Eastman, Paine, Webber International; Chase Manhattan; Citicorp International Bank; Credit Commercial de France (Securities) London; Daiwa Europe NV; EBC; First Chicago; Goldman Sachs International Corporation; Hambros Bank; IBJ International; Kidder Peabody International; Merrill Lynch; Morgan Stanley International; Nomura International; Orion Royal Bank; Robert Fleming and Co.; Samuel Montagu and Co.; Scandinavian Bank; Societe Generale Strauss Turnbull; Sumitomo Finance International; S. G. Warburg and Co.; Wood Gundy.

Closing prices on December 8

UK COMPANY NEWS

Record USM share offer values Synterials at £25m

BROKERS James Capel are launching the largest ever offer of shares on the three year old Unlisted Securities Market, by offering for subscription 20m £1 shares in Synterials.

The company has been formed to acqure the Dutch business Technovation for £4.4m and the whole of Synterials will have a market value at the offer price of £24.9m. The costs of the issue will amount to £1.3m.

Technovation is a greenfield venture, having never made a profit, while turnover over the past three years totals no more than £114,000. Over the same period the company made pre-tax losses of £4.24m.

Technovation produces industrial components from synthetic materials ("synterials") using what it terms "a flexible manufacturing system" and its own material and design technologies.

● comment

The complexities, both legal and financial, of offering £20m worth of shares in a new centure with no profit forecast, must have been nightmarish. That goes some way to explaining the whopping £1.3m costs of the issue. Whether the Synterials offer is correctly timed is another matter. Order book projections of £10m are tantalising, and the applications of Synterials' technology are potentially enormous. But the risks specified in the prospectus are worth reading carefully, particularly that pointing out that Synterials owns no exclusive proprietary rights in its technology. It might have been better if the old company—Technovation—had been able to attract sufficient extra finance from its institutional backers so as to delay its Stock Exchange debut until some of those indicated £10m further production orders had begun to trickle in. As it is, British investors should have learnt some healthy scepticism—if no more than that—of foreign based new venture companies seeking a UK quote. However the well known business names on the Synterials board suggest that a lot of reputations have been staked on the company justifying the faith of its sponsors.

BOARD MEETINGS

The following companies have notified dates of board meetings to the Stock Exchange. Such meetings are usually held for the purpose of considering dividends. Official indications are not available as to whether the dividends are interims or finals and the sub-divisions shown below are based mainly on last year's timetable.

TODAY

Interims: Baker Perkins, Blyvooruitzicht Gold Mining, Caffyn's, General Electric, Hazlewood Foods, Leigh Interests, Sangers, Shaw Carpets, West's Group International.

Finals: Crown House, Dobson Park Industries, Durban Roodepoort Deep, East Rand Proprietary Mines, Martin The Newsagent, RHP, Stanelco, Whitecroft.

FUTURE DATES

Interims—	
Batleys of Yorkshire	Dec 20
British Electric Traction	Dec 15
Capper-Neill	Dec 20
Doranakande Rubber Estates	Dec 15
Hampton Gold Mining Areas	Dec 19
Marston, Thompson and Evershed	Dec 19
Monk (A.)	Dec 19
Parkfield Foundries	Dec 16
Tops Estates	†Dec 15
Wight Collins Rutherford Scott	Dec 13
Finals—	
Johnson and Firth Brown	Dec 19
Stakis	Dec 15
United Scientific	Dec 15

† Corrected.

Exco stake in U.S. broking venture

EXCO International, the money broker and financial services group, is taking a 30 per cent stake in David Allsop, a small U.S. broking and fund management group, through a joint venture with British and Commonweallth Shipping.

The joint venture company in which the deal is being carried out is Financal and Investment Services Development Corporation. British and Commonwealth hold's 60 per cent of the shares and Exco holds the rest.

Allsop specialises in U.S. defence and oil stocks and its after tax profits for the last completed financial year were $1m.

Mr John Gunn, Exco's managing director, said yesterday that the deal did not form part of Exco's "mainstream acquisition plans" and that major deals would be carred out "under the Exco banner."

Exco is still studying the feasibility of creating ts own dealng unt by employng stockbrokers from member firms on the stockmarket following the breakdown in its discussions with Wood Mackenzie, the Edinburgh based stockbroker n which it was planinng to acquire a 29.9 per cent stake.

Braham Millar

The substantial order book with which the Braham Millar Group started the current year is reflected in the growth achieved in the first half. In the period ended September 30 1983 this mechanical engineering undertaking increased its sales by 17 per cent, from £3.88m to £4.55m, and its profits by 30 per cent, from £159,000 to £207,000.

Trading in the third quarter continues at a satisfactory level, and the directors expect that a similar pattern will continue in the closing months of the year. For the year 1982-83 the pre-tax profit totalled £384,000 and reflected a continuance of the group's recovery.

After tax £108,000 (£83,000), net profit for the half-year comes out at £99,000 (£76,000), equal to 0.8p (0.6p) per share. The interim dividend is being held at 0.4p net—the previous year's final was 0.6p.

Casket growth

Lord Barnett, chairman of S. Casket (Holdings), the clothing distributor and retailer, told the annual meeting that, with the first half almost over, the profits to date were confirming his forecast of a healthy increase. In the corresponding six months to December 31 1983 the profit was £281,000, rising to £514,000 by the year end.

Dividend policy would be reviewed when the figures were available, but Lord Barnett said he was conscious of the patience shareholders had shown during the rebuilding of the company's profits, and he hoped they would be able to benefit from the company's upturn.

F.T. Share Information

The following securities have been added to the Share Information Service:

Australia 11¾ per cent 2015 Intl Bk & O'Seas Govt Ster Issues)
Coin Inds (Industrials)
Edinburgh Fd Man (Trusts, Finance Land)
European Assets Trust (Trusts)
Imtec (Electricals)
Laidlaw (Motors)
Lon & Midland Inds Defd (Industrials)
Night Hawk Res (Oils)
Oliver Prospecting (Oils)
SCA Services (Americans)
Telemetrix (Electricals)
Windsor Res (Mines Australian)

Sheffield Brick loss increases to £0.3m but outlook improves

LOSSES of the Sheffield Brick Group increased from £123,000 to £299,000 for the first half of 1983, while external turnover of this builders' merchant and ironmonger dropped from an adjusted £2.55m to £2.22m.

The losses were struck after lower interest payments of £54,000 (£66,000) and exceptional debits up from £55,000 to £116,000. There is again no interim dividend—the last payment was in respect of 1981.

However, the directors believe there are definite grounds for cautious optimism about trading in the second half, although they will be unable to recommend a dividend for 1983.

Results for the first six months were disappointing, the directors say. The company has taken a harsh look at the provisions against debtors and included in the half year as exceptional items a special provision of £80,000 for possible bad debts, which it is energetically attempting to recover. A large proportion of these debts relates to previous years.

The directors believe that the management accounting systems in use during the early months of this year were inadequate and provided an inaccurate picture of the group's position. Steps have been taken and continue to be taken, to improve the quality of accounting, they state.

In October the company sold Parker, Winder and Achurch, which had not earned an adequate return since it had been a member of the group. Cash from this disposal will continue to be received over the next few months, and will strengthen further the rest of the group.

James Grant (East)

For the nine months ended October 31 1983 pre-tax profit of James Grant (East) rose from £298,000 to £408,000. The interim dividend is held at 1.25p net per share, payable December 15.

The company has closed all its retail outlets with the exception of the retail and commercial furnishing contract division and travel agency.

Profits continue to be derived evenly throughout the year from property rental, investment income and commodity trading. The letting and disposal of closed shops continues at a satisfactory pace.

GrandMet buyouts

Grand Metropolitan is offering to buy up the preference shares not already owned in two of its subsidiaries, Gordon Hotels and Grand Metropolitan Hotels (Scotland).

For the outstanding 88.3 per cent of the 5.5 per cent preference of Gordon the offer is 77p cash, and for the 49.9 per cent of the 5 per cent shares of Scotland terms are 70p cash.

The offers are intended to achieve administrative savings and to enable holders to dispose of their shares at a significant premium to recent market levels. Certain of the larger shareholders have indicated their intention to accept.

Jackson Ex. takes grip on expenses

A return to profit was experienced by Jackson Exploration in the third quarter of 1983, but for the nine months as a whole the company shows a net loss of $13.62m against a $742,049 surplus.

Net income, of this oil and gas explorer and producer, for the three months to September 30 1983 emerged at $217,961 against $21,626 as a result of a cut in expenses offsetting a fall in revenue. Expenses for the period totalled $2.4m ($3.58m) and revenue was $2.62m ($3.49m). For the nine months, revenue amounted to $8.15m ($8.08m) and expenses accounted for $22.12 ($7.31m).

During the quarter, three wells, two of which were successful, were drilled in the U.S., but neither of the successful wells is expected to make a significant impact on income during 1983.

Although U.S. revenues remain flat, due to weak demand, expenses continue to be tightly controlled, the directors state.

Commercial & Industrial £1.4m offer

Commercial and Industrial Securities (CIS), a private unlisted company with interests in contracting and shopfitting, leisure, and engineering and packaging, is making an offer worth the equivalent of £1.4m for the capital of Ionian Investments, which holds cash deposits and investments and is a subsidiary of Ionian Securities.

Preference and ordinary shareholders representing 82.6 per cent of the IIL voting rights have irrevocably agreed to accept. The directors, on the advice of Sheppards and Chase, recommend the offers to shareholders. CIS intends to apply to join the USM or for a listing on the Stock Exchange.

The capital of IIL is to be reorganised and then CIS will offer 40p cash for each preference share, and 18 ordinary shares, £30 nominal 11 per cent secured partly convertible loan stock 1990 with warrants, and £191.90 cash for every 1,000 ordinary IIL shares. Further consideration may be payable for the ordinary depending upon the outcome of certain litigation being conducted by IIL.

Mathercourt Securities is making the offer on behalf of CIS.

Reliant Motor recovery continues in opening half

THE RECOVERY seen at Reliant Motor in the second half last year continued throughout the financial year to September 30 1983 when pre-tax profits were £176,000 against £207,700. At halfway, the company reported profits of £11,000 compared with losses of £84,000 in the corresponding period last year.

Mr J. F. Nash, the chairman, says significant sums have been spent during the year on the sports car development programme, and these costs have been written off before arriving at the profit figure.

However, he says the need to conserve resources for the future investment programme means that the payment of a dividend would be unwise.

Turnover for the year improved from £11.5m to £12.92m, and there was an operating profit of £335,000 (£455,000). Interest charges were down from £247,000 to £159,000, but tax rose from £8,000 to £41,000, leaving net profits of £217,000 (£223,000, which included an extraordinary credit of £7,000).

Earnings per 5p share were unchanged at 3.9p.

Sales of the Rialto economy range of three wheelers have remained steady throughout 1983, and Mr Nash says he is encouraged by the level of demand for the vehicle during the winter months when, traditionally, a fall off in sales is to be expected.

He says the success of Rialto has been one of the major influences in Reliant's recovery and it will continue to make an important contribution to the company's future.

Fox production has been satisfactorily established and, although it is still early days to judge its impact on the lightweight commercial vehicle market, the company will not underestimate the difficulty in breaking into the fleet market currently dominated by the major manufacturers.

India still remains a promising, if somewhat elusive market. The long established and now mature market in Turkey remains stable and is confidently expected to continue at existing levels in the immediate future, he says.

The turnover generated by Reliant Industrial Mouldings is still relatively small although it is no longer trading at a loss. The potential for growth is real, even though trading conditions are competitive and difficult. Mr Nash looks forward to further improvement in this sector during 1984.

RECENT ISSUES

EQUITIES

Issue price	Amount paid up	Latest Renunc. date	1983 High	1983 Low	Stock	Closing price	+ or −	Net Div.	Times Covered	Gross Yield	P.E. Ratio
¶120	F.P.	22/11	132	103	✠Acorn Computer 1p	116	−1	—	—	—	27.6
115	F.P.	13/12	176	135	✠Aspinall Higgs 10p	143	−2	bg3.0	3.7	3.1	12.5
33	F.P.	21/12	34	30	✠Brewmaker 1p	30	−3	—	—	—	18.2
¶435	300	10/2	220	158	Brit. Petroleum	166	−4	20.25	1.9	7.2	11.2
¶273	100	—	102	96	Cable & Wireless 50p	100	−2	†h5.47	3.5	7.8	4.3
¶105	F.P.	28/10	112	107	Coin Inds. 10p	112	......	3.3	2.4	4.2	14.1
§76	F.P.	16/12	87	78	✠Edinb'gh Fd. Man 5p	87	......	bg1.8	2.8	3.0	17.0
97	F.P.	30/11	109	97	Europ'n Assets DFl. 1	109	......	rr Q10%	1.0	2.0	—
§54	F.P.	14/12	54	49	✠FederatedHousg 5p	50	+1	b2.45	2.4	7.0	8.3
‖‡77	F.P.	25/11	66	62	✠Flogas 10p	64	......	uQ33.8%	3.6	3.6	10.4
123	F.P.	16/12	127	112	✠FrenchConnect'n5p	127	......	bd3.9	2.7	4.4	11.5
§137	F.P.	—	140	138	✠High-point Serv. 10p	140	......	u3.0	3.4	3.1	11.1
§91	F.P.	26/11	91	75	✠Imtec Group 10p	75	......	u2.1	2.5	4.0	11.3
§139	F.P.	—	172	168	✠Kenyon Securities	172	......	b9.38	1.7	7.9	10.4
§45	F.P.	26/11	46	44	✠Laidlaw Group 10p	45	......	b2.5	2.6	7.9	6.5
¶220	F.P.	18/2	266	226	Logica 10p	260	......	u1.0	5.9	0.6	33.7
¶150	F.P.	—	155	150	Ldn. & Edin'gh Tst. 10p	152	+2	b5.25	2.5	4.9	9.6
§40	F.P.	—	41	40	✠MME facilities 10p	40	......	b0.7	3.3	2.5	15.5
§96	F.P.	16/1	101	93	✠Mebon 10p	94	+1	b3.4	2.0	5.2	13.0
§90	F.P.	16/12	109	97	✠Page (Michael) 5p	109	......	b1.4	3.3	1.8	25.6
§140	F.P.	—	163	146	✠Pericom 10p	163	+2	u1.7	4.9	1.5	16.7
§85	F.P.	21/12	105	95	✠Peters (Michael)	98	......	u1.79	1.7	2.6	28.8
§26½	F.P.	6/1	30	27	✠Protimeter 5p	30	......	u0.7	2.7	3.3	15.7
§90	F.P.	13/1	95	91	✠Tay Homes	91	−1	u4.1	2.1	6.4	9.3
185	F.P.	11/11	246	214	Telemetrix 5p	246	......	b1.4	5.5	0.8	32.0
¶110	F.P.	16/12	145	108	✠V. W. Thermax	145	+8	u5.25	1.8	5.3	16.1
§IR84	F.P.	9/12	183	168	✠Woodchstrinv.IR20p	168	−5	Q19.8%	4.1	1.8	14.4
—	F.P.	—	29	24	Witan Invs. Wrrnts	26	......	—	—	—	—

FIXED INTEREST STOCKS

Issue price £	Amount paid up	Latest Renunc. date	1983 High	1983 Low	Stock	Closing price £	+ or −
100	F.P.	3/1	102	101½	Bristol Waterworks 6.5% Red. Prf. 1988	102	......
99	£10	—	10½	9½	Colne Valley Water 6% Red. Prf. '90	10	......
¶	F.P.	9/2	120	115	Crystalate 8¼% Cnv. Ln. 2003	118	−2
99.15	£25	—	25¾	25	Elf (U.K.) 12¼% Uns. Ln. '91	25	−¼
—	F.P.	—	103	101	External Inv. 8% Cnv. Ln. 2003-08	103	......
*	F.P.	6/1	108p	96p	Fisher (A.) 7% Cnv. Prf.	108p	+1
100	F.P.	27/1	90½	90	Gen. Finance N/V 11.31% Ln. 2007	90½	......
99.714	£30	26/4	32⅝	30	Int. Bk. for Rec. & Dev. 11.5% Ln. 2003	31⅛	−⅝
97.268	£25	23/1	29⅞	25	Ireland 12⅛% 2008	29⅛	−¼
¶100p	F.P.	9/12	114p	100p	LASMO 9⅝% Cum Red Pref.	112p	−½
‖	£30	10/11	46	30½	Lon. Shop Prop. 9pc Cnv. 94/99 Ser II	46	......
§100	£10	—	11½	10¾	Mid Kent Wtr. 12pc. Red Deb. 1993	11½	......
—	F.P.	—	100⅝	99⅞	Nationwide 10⅞% Bds. 8/10/84	100⅛	......
—	F.P.	—	100⅛	100	Do. 10¼% Bds. 5/11/84	100⅛	......
—	F.P.	—	100⅛	99⅞	Do. 10⅛% Bds. 3/12/84	100⅛	......
100	£10	3/2	12	12	Sund'ld + S.ShieldsWtr6½pcRPF. 1989	12	......
§100	£10	—	11½	10¾	Tend. Hundred Wtr. 12pc Red Deb 1993	11½	......
¶99½	£10	—	12	11½	West Kent Wtr. 6.25pc Red Pref. 1988	12	......

"RIGHTS" OFFERS

Issue price	Amount paid up	Latest Renunc. date ●	Latest Renunc. date ■	1983 High	1983 Low	Stock	Closing price	+ or −
345	Nil	—	—	75pm	45pm	✠Air Call	75pm	......
140	Nil	—	21/12	10pm	2pm	Aitken Hume	3pm	−2
7	F.P.	—	15/12	10	7¾	Amal. Estates 5p	9	−1
58	F.P.	—	19/12	75	64	Arrow Chemicals	74	−1
25	Nil	—	16/12	12pm	6pm	Barget	12pm	+1
62	F.P.	—	13/1	71	66	Charterhall 5p	70	−1
100	Nil	—	15/12	21pm	15pm	Heywood Williams	21pm	......
25	F.P.	—	30/12	30	28	Manson Fin. 0p	30	......
25	Nil	—	15/12	5pm	3pm	Philcom 10p	5pm	......
95	Nil	—	16/1	100	90	✠Pineapple Dance 10p	100	......
85	F.P.	—	4/1	107	90	Ward White	104	......
‖	—	—	21/11	170	133	Western Mining Options	168	−2

Renunciation date usually last day for dealing free of stamp duty. *b* Figures based on prospectus estimates. *d* Dividend rate paid or payable on part of capital: cover based on dividend on full capital. *g* Assumed dividend and yield. *u* Forecast dividend cover based on previous year's earnings. F Dividend and yield based on prospectus or other official estimates for 1983. H Dividend and yield based on prospectus or other official estimates for 1983-84. Q Gross. ‡ Cover allows for conversion of shares not now ranking for dividend or ranking only for restricted dividends. ⊕ Figures or report awaited. § Placing price. *p* Pence unless otherwise indicated. ¶ Issued by tender. ‖ Offered to holders of ordinary shares as a "rights." ** Issued by way of capitalisation. §§ Reintroduced. ¶¶ Issued in connection with reorganisation merger or take-over. ‖‖ Introduction. □ Issued to former preference holders. ■ Allotment letters (or fully-paid). ● Provisional or partly-paid allotment letters. ★ With warrants. ‡ Effective issue price after scrip. † Formerly dealt in under special rule. †† Dealt in under Rule 163 (3). ✠ Unlisted Securities Market. * Comprising of 10 New ordinary plus 1 Series B Warrant.

PENDING DIVIDENDS

Dates when some of the more important company dividend statements may be expected in the next few weeks are given in the following table. The dates shown are those of last year's announcements except where the forthcoming board meetings (indicated thus*) have been officially notified. Dividends to be declared will not necessarily be at the amounts in the column headed "Announcement last year."

	Date	Announcement last year		Date	Announcement last year
Allied Colloids	Jan 12	Interim 0.65	*Lloyds and Scottish	Dec 21	Final 2.0
Assoc Leisure	Nov 30	Interim 2.0	*London Merchant Securities	Dec 15	Interim 0.5
*Assoc Newspapers	Jan 12	Finals 6.9	Magnet and Southerns	Jan 12	Interim 1.7
*Assoc Paper Industries	Dec 13	Final 2.8	*Meyer International	Dec 13	Interim 1.5
*BET	Dec 15	Interim 1.863	MFI Furniture	Jan 20	Interim 1.4
*Baker Perkins	Dec 12	Interim 2.1	*Norcros	Dec 19	Interim 2.08
Berisford (S. and W.)	Jan 17	Final 6.0	*Northern Foods	Dec 14	Final 3.75
Bio-Isolates	Jan 21	Final nil	Property Scrty Inv Tst	Jan 20	Interim 0.5
Common Bros	Nov 22	Final nil	*RHP	Dec 12	Final 2.0
Daily Mail and Gen Trust	Jan 14	Final 20.0	Racal Electronics	Jan 18	Interim 1.391
Davy Corp	Jan 20	Interim 1.1	Raybeck	Jan 7	Interim due
*Distillers	Dec 15	Interim 4.5	SGB	Jan 17	Final 3.8
Dixons	Jan 20	Interim 1.45	Samuel (H.)	Jan 10	Interim 1.5
*Electronic Rentals	Jan 5	Interim 1.1667	*Scottish and Nwcastle Brws	Dec 14	Interim 1.5
*English China Clays	Dec 15	Final 5.2	*Stakis	Dec 15	Final 1.26
Esta Prop Inv	Jan 19	Interim 2.75	Stead and Simpson	Jan 11	Interim 1.0
Eurotherm Intnl	Jan 20	Final 4.5	Tate & Lyle	Jan 19	Final 9.5
Fine Art Devs	Dec 1	Interim 1.1	Thorn EMI	Jan 14	Interim 4.05
*GEC	Dec 12	Interim 1.0	Trident TV	Jan 18	Final 3.0
*Grand Metropolitan	Dec 22	Final 4.875	Trusthouse Forte	Jan 19	Final 5.5
*Greene King	Dec 16	Interim 1.3	*Unigate	Dec 15	Interim 2.5
*Haslemere Estates	Dec 15	Interim 1.9	*Union Discount	Jan 25	Final 17.0
Hogg Robinson	Jan 11	Interim 3.0	*Wedgwood	Dec 16	Interim 1.75
*IC Gas	Dec 13	Interim 3.0	*Westland	Dec 14	Final 4.75
*Intasun Leisure	Dec 13	Interim 1.4	*Whessoe	Dec 19	Final 3.0
*Johnson and Firth Brown	Dec 19	Final nil	*Whitecroft	Dec 12	Interim 1.4
Kenning Motor	Jan 11	Interim 3.75			

* Board meeting intimated. † Rights issue since made. ‡ Tax free. § Scrip issue since made. ¶ Forecast.

Closing prices December 9

NEW YORK STOCK EXCHANGE COMPOSITE CLOSING PRICES

12 Month High	12 Month Low	Stock	Div	Yld	P/E	Sls 100s	High	Low	Close Quote	Ch'ge Prev. Close
17¾	8½	AAR	.44	3.2	17	29	14	13½	13⅝	−¼
52⅞	29½	ACF	1.40	2.8	240	253	50½	50¼	50¾	+⅛
18¾	18⅛	AMCA	n			6	u19	18¾	19	+¼
18⅝	14¾	AMF	.50	3.2		749	15¾	15½	15½	−¼
39⅝	18½	AMR Co			16	1760	36½	35¾	36	
19½	15	AMR	pf2.18	12.		z75	19	18½	18½	−½
40¼	24⅞	AMR	pf2.13	5.7		14	37⅞	37½	37½	−⅜
16¾	3⅞	APL			22	42	15¼	15	15	−⅛
55¼	37½	ARA	2.05	3.9	12	17	52⅞	52⅜	52⅝	
78⅞	50¼	ASA	3a	5.3		458	57⅞	56½	56⅝	
33¼	14	AVX	s .32	1.2	41	11	27½	27¼	27¼	−½
53¾	36⅛	AbtLab	1	2.2	16	2269	45½	44¾	44½	−⅜
30¼	23¾	AccoW	n .60	2.2	20	81	27¼	26⅝	27¼	+⅜
27½	16¾	AcmeC	.40	1.5		90	26¼	25⅝	26¼	+⅝
14⅛	7⅛	AcmeE	.32b	2.7	600	6	12	12	12	−⅛
24⅞	8¼	AdmDg	.04	.2	16	x9	20⅞	20¾	20¾	
18⅝	15	AdaEx	1.73e	9.5		47	18⅝	18	18⅛	−¼
19¾	7¼	AdmMl	.24	1.5	8	39	15¾	15½	15⅝	
18⅝	8¾	Advest	.12	.9	8	37	13	12¾	13	−¼
35½	11⅜	AMD	s		56	6480	33½	32¼	32¾	−⅜
24⅝	12⅞	Aeroflx	s		16	55	16¼	16⅛	15⅝	−⅛
43½	32⅞	AetnLf	2.64	7.3	9	x8602	36½	36	36⅛	+⅛
65	55¼	AetL	pf5.09e	9.1		x307	56½	56	56⅛	−½
40½	22½	Ahmns	1.20	4.3	8	829	28¼	27¾	28¼	−⅜
7⅝	2¼	Aileen				55	5⅛	5⅛	6⅛	−⅛
51	31	AirPrd	1	2.1	13	500	47	46⅛	46⅝	+⅛
30⅞	13⅜	AirbFrt	.60	2.1	23	66	29	28½	28¾	−¼
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

Continued on Page 19

AMERICAN STOCK EXCHANGE COMPOSITE CLOSING PRICES

Closing prices December 9

12 Month High	Low	Stock	Div.	Yld.	P/E	Sls 100s	High	Low	Close Quote	Ch'ge Prev. Close
[illegible]										

Continued on Page 23

NEW YORK STOCK EXCHANGE COMPOSITE CLOSING PRICES

Continued from Page 18

12 Month High	Low	Stock	Div.	Yld.	P/E	Sls 100s	High	Low	Close Quote	Ch'ge Prev. Close
[illegible]										
25⅝	14¼	Zero	.5	2.2	14	2249	23⅝	23¼	23⅝	+⅛
37⅝	24½	Zumin	1.32	4.5	10	120	29⅝	29¼	29½	−½

Sales figures are unofficial. Yearly highs and lows reflect the previous 52 weeks plus the current week, but not the latest trading day. Where a split or stock dividend amounting to 25 per cent or more has been paid, the year's high-low range and dividend are shown for the new stock only. Unless otherwise noted, rates of dividends are annual disbursements based on the latest declaration.

a-dividend also extra(s). b-annual rate of dividend plus stock dividend. c-liquidating dividend. cld-called. d-new yearly low. e-dividend declared or paid in preceding 12 months. g-dividend in Canadian funds, subject to 15% non-residence tax. i-dividend declared after split-up or stock dividend. j-dividend paid this year, omitted, deferred, or no action taken at latest dividend meeting. k-dividend declared or paid this year, an accumulative issue with dividends in arrears. n-new issue in the past 52 weeks. The high-low range begins with the start of trading. nd-next day delivery. P/E-price-earnings ratio. r-dividend declared or paid in preceding 12 months, plus stock dividend. s-stock split. Dividends begins with date of split. sls-sales. t-dividend paid in stock in preceding 12 months, estimated cash value on ex-dividend or ex-distribution date. u-new yearly high. v-trading halted. vi-in bankruptcy or receivership or being reorganised under the Bankruptcy Act, or securities assumed by such companies. wd-when distributed. wi-when issued. ww-with warrants. x-ex-dividend or ex-rights. xdis-ex-distribution. xw-without warrants. y-ex-dividend and sales in full. yld-yield. z-sales in full.

APPOINTMENTS

Tarmac makes changes

TARMAC's building products division has appointed **Mr David Moon** as managing director of the Metal Group, which includes the Brady Doors group of companies, and **Mr Tony Withey** becomes a group executive for the Trent Group, which with the exception of the insulation companies, controls mainly operations outside the mainstream businesses. Mr Moon comes to Tarmac from Ayrshire Metal Products, where he held a number of managerial positions, latterly as managing director of Metal Trim and deputy group managing director. Mr Withey assumes responsibility for ERP, Long & Hambly Pharmaceutical, Long & Hambly Plastics and Thomas Witter. He moves from BXL Plastics, a subsidiary of British Petroleum, where he was general manager. **Mr Alan Rabilly** has been appointed regional director in charge of Tarmac Roadstone (North-West). He joined the company in 1970.

★

PRUDENTIAL PORTFOLIO MANAGERS, investment arm of Prudential Corporation has made the following management appointments. **Mr Michael Roberts** has joined as an assistant director. Promoted to this newly-created position, from January 1, are **Mr Michael Carter, Mr Christopher Cheetham, Mr Howard Soley, Mr John Cozens, Mr Graham Poulton, Mr Edward Francis, Mr James Cox, Mr Brian Kirkland and Mr Richard Gawthorne.**

★

DRAKE & SCULL HOLDINGS, engineering services group of Simon Engineering, has appointed **Mr Raymond G. Barton**, as financial director. Previously financial director of the operating companies from 1970, he was appointed financial adviser to the Drake & Scull group board on November 1, 1982.

★

Mr M. Victor Blank has been appointed a managing director of CHARTERHOUSE JAPHET. He is head of corporate finance at Charterhouse Japhet and a director of the Charterhouse Group.

Mr Roger Adams joins the board of WILTSHIER INTERIORS on December 1 as director general manager with responsibility for UK contracts. He comes from Samuel Elliott and Sons (formerly a subsidiary of Sir Robert McAlpine) where he was managing director.

★

TELFOS HOLDINGS has appointed **Mr G. Rowley** a director.

★

Mr Keith Brooks has been appointed managing director of GLOBAL WATCHES, distributor of the Sekonda brand. He takes over from **Mr Roland Baker** who has moved to Hong Kong to head Remex Holdings, a post previously held by Mr Brooks. Both companies are divisions of Time Products.

★

LONDON & CONTINENTAL BANKERS has promoted **Mr Jeffrey Frost**, hitherto an associate director, to executive director.

★

BRABURY has appointed **Mr Tim Lowden** as managing director. He joined as financial director a year ago, and takes over the management from **Mr David Mordaunt**, company chairman and chief executive. The change releases Mr Mordaunt from the day-to-day running of the company, enabling him to concentrate on long-term business strategy and the shaping of company policy.

CONSTRUCTION CONTRACTS

Cementation wins £55m work in Nigeria

CEMENTATION INTERNATIONAL has started work on two major contracts in West *Africa with a combined value of* £55m.

Aprofim (UK) has awarded a £34m sub-contract in Gongola State, North East Nigeria. The project entails supply of UK goods and services for three projects for Gongola State Government—a hospital, separate rural electrification schemes and three lengths of roadway together with bridges. All projects are expected to be underway before the end of the year with completion scheduled for the end of 1986. An export credit to assist in the financing was arranged by Morgan Grenfell and Co and guaranteed bythe Export Credits Guarantee Department.

Cementation and Cannon Construction, a Nigerian joint venture company, are involved in building Makurdi central market. Work is now underway with completion expected by the end of 1985. The contract, valued at £21m will provide 2,500 market stalls in blocks of varying sizes. A two-storey administration building will accommodate a police station, clinic, post office, abattoir, bank and a number of shops. The area will also include a children's playground, warehouses, service buildings and parking for cars and buses. Associate Trafalgar House companies Dorman Long Bridge and Engineering, and Young Austen and Young, will be involved in aspects of the work.

★

FAIRCLOUGH SCOTLAND has been awarded two contracts worth more than £825,000 by the Scottish Special Housing Assoc. *Work involves converting* existing flats in Paisley into sheltered accommodation and the insulation of 60 houses in Johnstone. Completion of both contracts is programmed for spring 1984. Fairclough Scotland is part of AMEC.

★

MILLARD CONTRACTORS of Tipton, West Midlands, has started work on the following construction contracts: 26 traditional houses at Larkhill, Kidderminsetr for Wyre Forest District Council at a cost of *£558,606; new cold store at* Stourbridge for Fiesta Foods wotrh around £400,000: 30 flats, one warden's house and one day centre at Stoney Lane, Yardley, Birmingham, for the Trustees of the Yardley Poors Charity costing £680,000 and a dust handling building at Crown Street, Wolverhampton, for West Midlands County Council worth £43,483.

★

NORWEST HOLST GROUP has gained £18.6m worth of new contracts. Work is already well underway on a £10.3m contract at the Sir John Moore Barracks, Winchester. The contract calls for construction of a depot for the Light Division. Phase 2 will comprise two recruit barrack blocks, a further two blocks for permanent staff and a senior NCO mess. A combined junior ranks mess and club will be constructed inside a part one and two-storey structure. A three-storey indoor training and education building will be com*pleted. A two-storey office block* and Church is included in Phase 2. A further structure will house quartermasters stores, guard room, boiler house and PSA works compound.

The PSA has also awarded a £2m contract for a single-storey pitched roof complex to be occupied by Army personnel. The contract, scheduled for completion early 1985, is at Berechurch Hall Road, Colchester. Nash House in Maddox Street, W1 is the location of a £1.05m contract awarded by Martin Brent Deve*lopments, for construction of a* six-storey office block with basement. Work involves demolition with temporary support to the adjacent properties. Completion is scheduled for November 1984.

British Gas Corp, Scottish region, has awarded a £1.25m contract for mains and service-laying with completion scheduled for May 1985. The Ealing and District YMCA Housing Association has awarded a contract valued at £1.8m for construction of a YMCA Hostel with extensive community *facilities.* The building consists of three wings with pitched roofs. Sited at St Marys Road, Ealing, *work is due for* completion in August 1985.

Work has just commenced at BBC Bush House on Phases 3 and 4 of a contract valued at £501,000 for the demolition and construction of broadcasting studios, cubicles, offices and corridors for BBC External Services (BBC World Service). Completion is scheduled for October 1984.

★

J. DONELLY CONSTRUCTION *has secured contracts amounting* to around £2m in the North West. Work includes 34 flats at Sale for the Guardian Housing Association, value £559,000; advance office shells at Birchwood for Warrington & Runcorn Develepoment Corp. worth £402,000 and industrial units at Trafford Park for Mathind (Commercial) valued at £450,000.

★

JOHN LELLIOTT has won a batch of contracts worth £7m. A Homebase home improvement centre *for J. Sainsbury is to* be built at 473 High Road, Willesden, in a contract valued at £1.3m. The British Gas Corp has awarded a £1.1m contract to construct and commission a multi-purpose building with accommodation at ground floor and plant rooms at first floor level. At 30-31 Furnival Street, EC4, a £1m contract is under way to construct a five-storey office for The Prudential Assurance Company. A £1.5m project has just commenced at 1-8 St Andrews Place, NW1, for the Royal College of Physicians. The terraced property will be repaired and renovated to form office and executive suites for *institutional use. A supermarket* shell at 264-276 Walworth Road, SE17, is to be fitted out for Argyll Stores (Properties) at a cost of £812,000.

★

CEMENTATION CONSTRUCTION, UK building and civil engineering arm of the Trafalgar House Group, has won £4.2m worth of contracts in the North. The majority of the work will be carried out by its specialist section, Cementation Pipelines and Mechanical Services, at Darlington. The largest contract worth £2.18m is to construct 1.5 km of sea outfall pipeline for Northumberland Water at Langbaurgh midway between Redcar and Marske. On the River Wear a £320,000 contract will shortly begin for the Borough of Sunderland to sheet pile and rebuild part of the river wall. Work has started on a £875,000 below ground pipework installation for the British Gas Corp. at Hornsea; and at Bolton Colliery, Tyne & Wear, the Borough of South Tyneside has awarded Cementation a £500,000 sewer and drainage contract.

★

A contract worth over £5.25m has been awarded to **SIR ROBERT McALPINE & SONS** by Wimpey Construction UK, management contractors for Britoil's new offices in St. Vincent Street, Glasgow. The contract is in two parts; the first comprises the substructure including excavation associated with pile caps, drainage, retaining walls and the laying of a concrete basement slab. The second covers the superstructure, which is of reinforced *concrete frame construction pro*viding five storeys above ground level and four below, which include laboratories, car park and plant rooms. Work has begun, and is due for completion in June 1985. The building should be ready for occupation in 1986.

★

Contracts worth more than £4m have been awarded to **MANSELL** for building and refurbishment projects throughout Greater London. At St George's hospital, Tooting, alterations worth more than £736,000 are to be carried out to the obstetric and baby unit; houses at Earls Court Square are being fitted out as flats under a £570,000 contract, and repairs to flats in Dulwich and Bermondsey are being carried out for the London Borough of Southwark under contracts totalling almost £500,000. Other contracts include £495,000 reconstruction work at Ramsden school, Orpington; creation of a community health headquarters in New Cross under a £114,000 contract; repairs to the Central Foundation Boys School at Cowper Street, EC2, and repairs to buildings in Wesley's Chapel complex at City Road.

BUSINESSMAN'S DIARY

UK TRADE FAIRS AND EXHIBITIONS

Dec 13-15
Automatic Testing and Test Instrumentation Exhibition and Conference (Market Hill, Bucks (02802) 815226) **Brighton**

Dec 14-15
Exhibition and Conference Industry Trade Event (Shepperton (09322) 43866) **Cunard International**

Dec 15-18
Your Computer Christmas Fair (01-643 8040) **Wembley Conference Centre**

Jan 4-8
Caravan, Camping, Holiday and Travel Exhibition (Bristol (0272) 650908) **Bristol**

Jan 4-15
London International Boat Show (Weybridge (0932) 54511) **Earls Court**

Jan 7-12
Harrogate International Toy Fair (01-226 6653) **Harrogate**

Jan 10-12
Golf Trade Exhibition (Dundee (0382) 2450) **Edinburgh**

Jan 16-19
Pipelines, Pipework Pumps and Valves Exhibition and Conference (01-637 2400) **N.E.C., Birmingham**

Jan 17-20
Which Computer? Show (01-747 3131) **N.E.C., Birmingham**

Jan 19-22
Home Entertainment — Hi-Fi, personal computer and software accessories exhibition (01-855 7777) **Manchester**

Jan 24-26
International Contract Flooring and Wallcovering Exhibition (South Ascot (0990) 24366) **Cunard International**

Jan 28-Feb 1
Stationery Industry Exhibition —STATINDEX (01-385 1200) **Earls Court**

Jan 29-Feb 1
Video Software Show (01-686 2599) **Heathrow Penta Hotel**

Feb 2-5
Money Show (01-262 3382) **Kensington Exhibition Centre**

Feb 5-9
International Spring Fair (01-855 9201) **NEC, Birmingham**

Feb 10-12
Crufts Dog Show (01-493 7838) **Earls Court**

Feb 12-15
International Men's and Boys' Wear Exhibition — IMBEX (021-705 6707) **Barbican Arts Centre**

OVERSEAS TRADE FAIRS

Jan 10-13
Masstransit Show (01-891 2606) **Singapore**

Jan 11-16
International Lighting Exhibition (01-439 3964) **Paris**

Jan 12-17
Amusement Trades Exhibition and Congress — INTERSHOW (Poole (0202) 687070) **Hamburg**

Jan 15-19
Middle East Electricity and Electronics Exhibition (01-831 8981) **Kuwait**

Jan 20-29
International Commercial Motor Show (CH-1218 Grand Saconnex Geneva) **Geneva**

Jan 25-28
International Electronic Packaging and Production Equipment Exhibition — INTERNEPCON ELECTROTEST (0483 38085) **Tokyo**

Jan 29-Feb 1
International Confectionery, Chocolate and Biscuit Trade Exhibition — INTERSUC (01-439 3964) **Paris**

Jan 31-Feb 5
Holiday and Leisure Fair (Dublin 985711) **Dublin**

Feb 8-11
International Housewares Fair (01-930 7251) **Cologne**

Feb 10-13
International Exhibition of Houschold Goods, Crystalware, Ceramics, Silverware and Gifts—MACEF (01-342 7829). **Milan**

Feb 12-16
International Food Fair—ROKA (01-486 1951) **Utrecht**

Feb 21-24
Asian Petroleum Exhibition and Conference — OFFSHORE S.E. ASIA (01-486 1951) **Singapore**

BUSINNESS & MANAGEMENT CONFERENCES

Dec 14
Circuit Plan: Cable television—franchises now and later (01-221 3417) **Park Lane Hotel, W1**

Dec 14
Eurofi and the BOTB: European Development Fund (Northill Beds (076727) 680) **London Business School**

Dec 14-16
IFHP/IULA: Changing roles for local and regional government in environmental management (70-244577) **Maastricht, Netherlands**

Dec 15
ESC: acquiring a company (Uppingham (0572) 822711) **Kensington Palance Hotel, W8**

Dec 16
BSCA: computer aided design of structural steel to the new British Standard 01-834 1713) **NEDC office, SW1**

Jan 1
CBI: equal pay for equal value (01-379 7400) **Centre Point, WC1**

Jan 12-13
Brunel Management Programme: alternative futures — using scenarios in strategic planning (Uxbridge (0895) 56461) **Brunel University, Uxbridge**

Jan 12
The Institute of Taxation: Business tax and other financial incentives (01-235 8847) **Royal Air Force Club, W1**

Jan 16-17
FT Conference: aerospace in Asia and the Pacific basin (01-621 1355) **Singapore**

Jan 17
CBI Canning House: Inter-American Development Bank (01-379 7400) **Centre Point, WC1**

Jan 18
The Henley Centre for Forecasting: Consumer markets: forecasts and opportunities (01-353 9961) **Dorchester Hotel, W1**

Jan 19-20
Macfarlane Conferences: The 1984 Pan-European Consumer Advertising and Marketing Symposium (01-637 7438) **Royal Lancaster Hotel, W2**

Jan 22-27
TAVI/HR: "Rethinking and action planning for organisational change" (01-435 7111) **Brighton**

Jan 24
LCCI: Licensing and technology transfer (07535 56633) **Cannon Street, EC4**

Jan 25-27
INSIG: 8th International seminar on "Security in Banking (Paris 763-07-24) **Paris**

Jan 26
Dun & Bradstreet: time management techniques, a seminar for sales managers (01-337 4377) **Kensington Palace Hotel, W8**

Feb 6-8
Frost and Sullivan: Human performance engineering (ergonomics) in computer systems (01-486 0334) **Cumberland Hotel, W1**

Feb 7-8
Spectra: Electronic point of sale —designing the right system for your business (Twyford (0734) 345585) **Shoppenhangers Manor, Maidenhead**

WEEK'S FINANCIAL DIARY

The following is a record of the principal business and financial engagements during the week. The board meetings are mainly for the purpose of considering dividends and official indications are not always available whether dividends concerned are interims or finals. The sub-divisions shown below are based mainly on last year's timetable.

TODAY

COMPANY MEETINGS—
Abaco Invs, Great Eastern Hotel, Liverpool Street, EC, 12.00
Glaxo, Park Lane Hotel, Piccadilly, W, 12.00
Lucas Inds, Birmingham Metropole Hotel, *National Exhibition Centre Birmingham*, 12.00
New Cavendish Ests, 24, Austin Friars, EC, 10.00

BOARD MEETINGS—
Finals:
Crown House
Dobson Park Inds
Durban Roodepoort Deep
East Rand Proprietary Mines
Martin the Newsagent
RHP
Staneko
Whitecroft
Interims:
Baker Perkins
Blyvooruitzicht Gold Mining
Cahyns
General Electric
Hazlewood Foods
Leigh Interests
Sangers
Shaw Carpets
West's Group Intnl

DIVIDEND & INTEREST PAYMENTS—
Bank of Tokyo (Curacao) NV Gtd. Fltg. Rate Nts. Dec. 1991 $264.97
Bishopsgate Tst. 1.2p
Citicorp Overseas Fin. NV Gtd. Rate Nts. 1994 $26.23
Duport 0.3p
Ellis and Goldstein 0.85p
Exchequer 12pc 2013-17 6pc. 10pc 1983 5pc
Francis Parker 0.525p
Howden-Stewart Plant 0.475p
Honeywell 90cts.
M.Y. Dart 0.25p
Mobil 50cts.
Monsanto 105cts.
Nedibra Fin BV Gtd. 1983 $2622.57
Rockwell Intnl 22cts.
Treas. 12pc 1986 6pc

TOMORROW

COMPANY MEETINGS—
Fairview Ests, Chartered Accountants Hall, Moorgate Place, E.C., 10.30
Herman Smith, B'ham. Chamber of Industry, Commerce 75 Harbourne Road, B'ham., 10.00
Maiedie Invs., Sugar Assoc. of London Plantation House, Mincing Lane, E.C., 12.15
Safeguard Ind. Invs., Hill House 1, Little New Street, E.C., 11.30
Samuel Props., 100 Wood St., E.C., 3.00
Smiths Inds., 765, Finchley Road N.W., 12.00

BOARD MEETINGS—
Finals:
Assoc Paper Inds
Burns-Anderson
Chapman Inds
McCorquodale
NSS Newsagents
Plaxton's (GB)
Smith & Nephew
Interims:
Beechwood
Bristol Evening Post
Dreifkraal Gold Mining
Doornfontein Gold Mining
Driefontein Consolidated
Firth (G. M.)
Imperial Continental Gas Assoc
Intasun Leisure
Kloof Gold Mining
Libanon Gold Mining
Meyer Intl
Premier Consolidated Oilfields
RFD
Triplex Foundries
Ventersoost Gold Mining
Western Motor
Wight Collins Rutherford Scott

DIVIDEND & INTEREST PAYMENTS—
Banco Nacional De Desarrollo Nts. 1987 $52.74
European Asian Cap. Nts. 1989 $263.70
Finlay Packaging 7½pcDb 1986-91 3¾pc
Hungary (National Bank) Flg rate notes 1985 $263.70
Linread 0.1p
Malaysia Mining Cpn. Berhad 0.51835p
Singapore Para Rubber Ests., 0.4p
Smith, St. Aubyn 1.5p
Sun Life Ass. Soc. 8.48p
Tenneco 70cts.

WEDNESDAY DECEMBER 14

COMPANY MEETINGS—
Cramphorn, Cuton Mill Chelmsford, Essex, 12.00
Fisher (A.), Royal Berkshire Hotel, Sunninghill, Ascot, Berkshire, 12.00
Grosvenor Group Goring Hotel, Beetson Place, Grosvenor Gardens S.W., 11.30
London Entertainments, Palace Theatre, W., 12.15
Manganese Bronze, 1, Love Lane, EC, 12.00
Pearce (C. H.) Parklands, Stoke Gifford, Bristol, 12.30
Town Centre Secs., Town Centre House Merrion Centre, Leeds 12.00

BOARD MEETINGS—
Finals:
Irish Distillers
Northern Foods
North Midland Construction
Nottingham Brick
Redfearn National Glass
Spencer Clark Metal Inds
Stainless Metalcraft
Westland
Interims:
Bisichi Tin
Bulmer (H. P.)
Downs Surgical
Jacksons Bourne End
London & Associated Inv Tst
Moorgate Inv Tst
Scottish & Newcastle Breweries
Thermal Scientific
Thorpac

DIVIDEND & INTEREST PAYMENTS—
Bulgin (A. F.) 0.58p. Do. A NV 0.58p
Cramphorn 20p
Cullen's Stores 0.7p. Do. A 0.7p
Gieves 1.1p
Initial 4.25p
Maiedie Invs. 3.3p
Marlborough Prop. 0.2p
Safeguard Ind. Invs. 4.1p
Saker's Fin. and Inv. 10cts.
Viking Res. Tst 0.4p

THURSDAY DECEMBER 15

COMPANY MEETINGS—
Arenson, Lincoln House, Colney Street, St Albans, Hertfordshire, 2.30
Hepworth (J.) Queens Hotel, Leeds, 11.15
LWT, South Bank Television Centre, Kent House, Upper Ground, S.E., 3.00
McKechnie Bros., Midland Hotel, B'ham., 12.00
Peters Stores, Holiday Inn, Great North Road, Seaton Burn, Newcastle-upon-Tyne, 12.00

BOARD MEETINGS—
Finals:
AE
Elson & Robbins
English China Clays
Flexello Castors & Wheels
Lee (Arthur)
M & G Group
Stakis
United Scientific
Interims:
Arlington Motor
British Electric Traction
British Steam Specialties
C. H. Inds
Continuous Stationery
Cooper Inds
Distillers
Doranakande Rubber Ests
Fuller Smith & Turner
Haslemere Ests
Ingram (Harold)
London Merchant Secs
Modern Engineers of Bristol
Paterson Jenks
Phoenix Timber
Plysu
Stewart & Wight
Tex Abrasives
Tops Ests
Unigate

DIVIDEND & INTEREST PAYMENTS—
AECI 5½pcPf 5½pc
Ambrose Inv. Tst. 3p
Amfac 36cts.
B.B.L. Intnl 1995 $57.34
BSR 5¼pc 1985-90 2¾pc
Baltic Leasing 1.87p
Barclays Overseas Nts 1990 $51.47
British Alcan Aluminium 8¼pcDb 198-86 4⅛pc
Caisse Nationale Des Autoroutes 16pc Ln. 2006 8pc
Canadian Overseas Pack. Ind. 29cts.
Causton (Sir Joseph) 0.7836p
Chesebrough-Pond's 46cts.
Continental Group 65cts.
Cummins Eng. 50cts.
Dana 28cts.
Drayton Premier Tst. 4¼pcDb 2⅛pc
East Rand Gold and Uranium 15.79687p
Emhart 70cts
Florida Power and Light 90cts.
Framlington Overseas Inc. Growth Fund Pf. 0.9p
Free State Geduld Mines 123.50125p
General Motors 100cts. Do. 5cts.
Gill and Duffus 4p
Investors Cap. Tst. 5¼pcPf 1.8375p
London Entertainments 1.92p
London Sumatra Plants. 2p
Louisiana Land and Expln. 25cts.

DIVIDEND & INTEREST PAYMENTS—
M and G Midland and Gen Tst Fund 5.55p
Milletts Leisure Shops 2.95p
NEC Con. 3.75 Yen
Nat. Medical Enterprises 11cts
New Zealand 7½pc 1983-86 3¾pc
Owensillinois 42cts
Pennzoil 55cts.
President Brand Gold Mining 126.37337p
President Brand Gold Mining 146.47823p
Ranks Hovis McDougal 7¼pcLn. 1991 86 3⅝pc
Riley Leisure 2p
Riverview Rubber Ests. Berhad $M0.08
St. Lawrence and Ottawa Railway 4pc1st Bds. 2pc
Sea Containers Pf. $0.365625
Seagram 17cts.
Singer 10cts
Steel Bros. 4p
Sunderland 12¼pc 1984 6⅛pc
Sungei Banru Rub. Ests. 2.25p
TRW 70cts
Time 25cts
Treasury 8¼pcLn. 1987-90 4⅛pc
Utd. Biscuits 7½pcDb 1981-86 3¾pc. Do. Db. 1993-98 4pc
Utd. Mizr. Intern. Nts. 1987 $514.69
Websters 0.9p
Welkom Gold Mining 48.25165p
Western Deep Levels 12pcDb 1986-93 3.33128p

DIVIDEND & INTEREST PAYMENTS—
Western Hldgs. 186.68794p
Whitworth Elec 1.509375p
Winterbottom Energy Tst. 3½pcPf 1.75p
Witan Inv. 5½pcDb 1980-84 2¾pc

FRIDAY DECEMBER 16

COMPANY MEETINGS—
Attwoods, Expedier House, Portsmouth Road, Hindhead Surrey 11.00
Bailey (C. H.) Bute Dry Dock, Cardiff 12.00
Barton Transport The Novotel, Bostock Lane, Long Eaton, Nottingham, 11.00
Baezer (C. H.), Beaufort Hotel Walcot St. Bath, 11.45
Border and Southern Stockholders, Winchester House, 77 London Wall, E.C., 10.00
British Car Auction Expedier House, Portsmouth Road, Hindhead Surrey, 12.00
British Empire Secs. and Gen., Saddlers' Hall, Gutter Lane, Cheapside, E.C., 12.00
Clyde Blowers, Livingstone Street, Clydebank Dumbartonshire, 11.00
Lowland Inv., 26 Finsbury Square E.C., 2.30
Martin (R. P.) Cutlers Hall Warwick Lane, E.C., 10.30
North Sea Assets, 1, Charlotte Square, Edinburgh, 12.00
Smart (J.) (Contractors), 28, Cramond Road South Edinburgh, 12.00
Standard Industrial Great Eastern Hotel, Liverpool Street E.C., 11.00
Wolsey-Hughes, Vines Lane Droitwich, Worcestershire, 2.30

BOARD MEETINGS
Final:
Hardys & Hanson
Interims:
Greene King
Parkfield Foundries
Wedgwood

DIVIDEND & INTEREST PAYMENTS—
Arbuthnot Sterling Fund Ptg Pf 0.5p
Assoc Leisure 1.6p
British-Borneo Petrol Syndicate 5p
Falcoln Mines 40 cts
Fleming Far Eastern Invest Tst 0.5p
GATX 50 cts
Hill (Philip) Invest Tst 1p
Industrial Credit and Invest Corpn of India Notes 1991 $258.93
Land Secs 3.3p
London Atlantic Invest Tst 1.75p
National Commercial Bkg Corpn 12 cts
1928 Invest Tst 2p
Northern Goldsmiths 1.85p
Outwich Invest Tst 0.75p
Pochin's 11p
Portsmouth and Sunderland Newspapers 1p
Rosehaugh 2.87p
Taiwan Power Notes 1992 $517.86
Thomas Nationwide Transport 3 cts
United Biscuits 5¼pcLn 2003-08 2⅝pc
United Ceramic Distributors 1p
Ward White 1.54p
Whittington Eng 1.4p

SATURDAY DECEMBER 17

COMPANY MEETINGS—
Morland, The Brewery, Oak Street, Abingdon, 12.30

DIVIDEND & INTEREST PAYMENTS—
Martin (R. P.) 7.3p

This week's business in Parliament

TODAY

Commons: Until 7 pm, consideration of Private Members' Motion. Later, remaining stages of the Coal Industry Bill, and the Town and Country Planning Bill. Motion on the Eligibility *for Release on Licence Order.*

Lords: Matrimonial and Family Proceedings Bill, Committee. Farm Structure (Payments to Outgoers) (Extension of Duration) Scheme 1983: motion for approval. Pneumoconiosis etc (Workers Compensation) (Payments of Claims) (Amendment) Regulations 1983, motion for approval.

Select Committee: Public Accounts: Subject — Financial assistance to De Lorian Cars Ltd. Witnesses: Nominee Directors of De Lorian Cars Ltd: *Alex H. Fetherstone, R. J.* Henderson. Northern Ireland Development Board: Mr Saxon Tate, Chief Executive; Mr A. S. Hopkins, Deputy Chief Executive. Department of Economic Development, Northern Ireland: Mr K. P. Bloomfield, CB, Permanent Secretary. *Department of Finance and Personnel*, Northern Ireland: Mr John Murray, Officer of Accounts (Room 16, 4.45 pm).

TOMORROW

Commons: London Regional Transport Bill, Second Reading. Motion on EEC document No. 8922/83 on the Multi-annual programme for Transport Infrastructure. Motion on the Industrial Training Levy (Construction Board) Older. The House will be asked to agree the civil and defence votes on account and the Winter Supplementary Estimates.

Lords: British Shipbuilders (Borrowing Powers) Bill, Third Reading. Judgement Enforcement (Attachments of Debts) (Northern Ireland) Order 1983, motion for approval. Petroleum Royalties (Relief) Bill: Committee. *Agricultural Holdings* Bill, Committee. Appropriation (No. 3) (Northern Ireland) Order 1983. Northern Ireland (Emergency Provisions' Act 1978 (Continuation) (No. 2) Order, Motions for approval.

Select Committees: House of Commons (Services) Computer Sub Committee: Subject—Information Technology: Members' Requirements. Witnesses: Mr Stuart Randall MP, Mr Barry Henderson MP, Mr Phillip Oppenheim MP (Room 8, 4.00 pm).

Public Accounts — Subject: Financial Assistance to De Lorean Cars Ltd. Witnesses: McKinsey and Co: Mr John Banham, former partner; Cork Gulley: Sir Kenneth Cork GCB, D.Litt, Mr Paul Shewell; Mr Christopher Hughes (Room 16, 4.15 pm).

WEDNESDAY

Commons: Remaining stages of the Telecommunications Bill.

THURSDAY

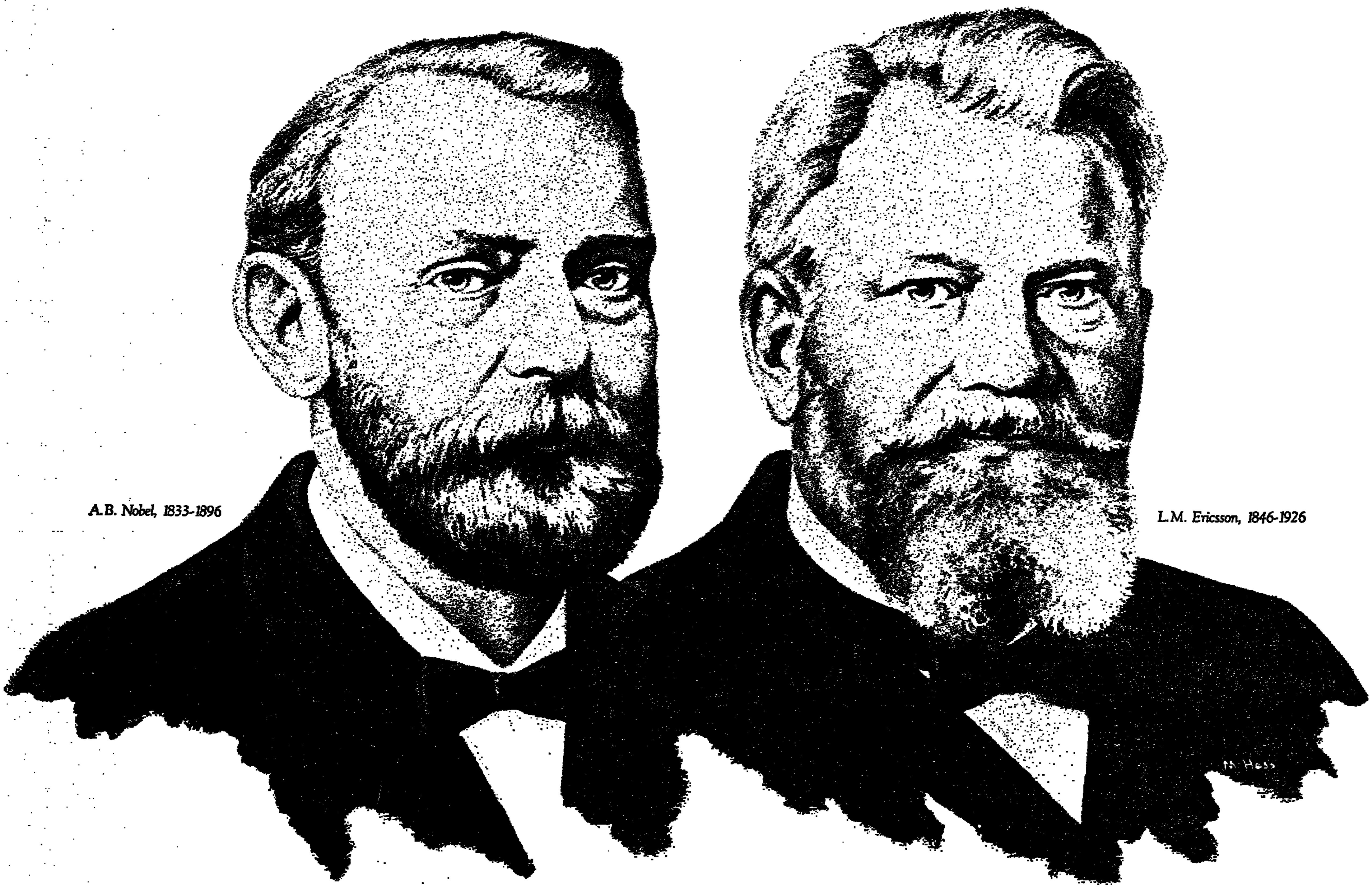
Commons: Remaining stages of the Telecommunications Bill. Motions on the Agricultural and Horticultural Co-operation and Grant (Variation) (No. 2) and (No. 3) Schemes.

Lords: Restrictive Trade Practices (Stock Exchange) Bill, Second Reading.

FRIDAY

Commons: Private Members' Bills.

Lords: Social Security regulations, motions for approval.



A.B. Nobel, 1833-1896

L.M. Ericsson, 1846-1926

ONE MAN'S NAME IS ON EVERYBODY'S LIPS. THE OTHER ONE'S SOON WILL BE.

They both lived in Stockholm during the second half of the 19th century. Both were prominent inventors and industrialists.

Alfred Bernhard Nobel was a chemist. His most famous invention was dynamite. But he is best known for bequeathing his vast fortune to institute the prizes that bear his name.

Lars Magnus Ericsson was a telecommunications pioneer. The company he started over a hundred years ago is the world's fourth largest in its field.

This year, it is 150 years since Alfred Nobel was born. And his prizes will be awarded again for the 82nd time.

We at Ericsson want to remind you of this occasion not for sentimental, historical reasons, but because we firmly believe that science and technology can help make the future better for all of us.

We have been helping to make communication between individuals, organizations and nations easier ever since the days of Alfred Nobel. Today, we are known as the pioneer in the digitalization of the global telephone network.

And the more we innovate in areas like data processing, information systems and cellular radio, the better you, too, will get to know us.

Write to us, on your company letterhead, for a free 12-page booklet on Alfred Nobel and his work—and a little on what Ericsson's all about.

ERICSSON

TELEFON AB L.M. ERICSSON, 12625 STOCKHOLM, SWEDEN

TECHNOLOGY

EDITED BY ALAN CANE

CANADIAN GROUP, HRS INDUSTRIES, ADDS A TOUCH OF COLOUR TO BLACK AND WHITE FILMS

Old movies yield to painting by numbers

BY NICHOLAS HIRST IN TORONTO

A TORONTO video studio is about to give "Play it again Sam" a whole new meaning. Vidcolor, a subsidiary of entertainment group HRS Industries, has invented a cheap, quick method of adding a touch of colour to a monochrome Humphrey Bogart.

Vidcolor can turn old black and white films into coloured videotape. The kind of computer techniques which propelled George Lucas into a Star Wars future have taken Mr Wilson Markle, Vidcolor's president and inventor, into the past.

Mr Markle could turn Bogart's smokey grey Casablanca bar into murky blues and greens, show viewers the colours of the Maltese Falcon, or present the sickly hue of the custard pie landing in Stan Laurel's face.

Mr Markle's invention has been made possible by the microprocessor. He uses off-the-shelf computer hardware and dedicated in-house developed software to colour films on videotape in a fraction of the time it would take by the only other available method—hand-painting.

Using computers, an art director "paints" the first frame of a scene. The colours are then locked in for the remainder of that scene. Changes in the picture, such as a new character coming in shot can be melded into the process and scene by scene a whole film can be computer painted.

An old two-reeler, an 18 minute short, for example, would take an average of two days to complete. By hand-painting a similar length feature could take two years.

But why bother colouring old films? Isn't it almost a sacrilege of an artform to mess around with old black and white masterpieces and show them in a way they were never intended to be shown? Mr Markle thinks not.

The market for the new technique is not an art film theatre showing movies to dedicated black and white film buffs, says Markle, but the thousands of hours of entertainment time to be filled on broadcast, cable and satellite television.

"There is a psychological barrier to viewing black and white film which produces a negative reaction in a large proportion of the television audience," says Mr Markle. "To that audience, black and white means outdated."

He argues that far from spoiling an art form, the process enhances the clarity of the picture and with better sound quality improves all viewers' appreciation. So far even the die-hard fans of black and white have been converted. A Laurel and Hardy fan club in Britain, having had a preview of the process, is begging to be shown a copy of an 18-minute feature.

Vidcolor's process was first shown in prototype form with just a few minutes in colour in February of last year. Its first two-reeler is about to be completed and a full launch of the commercial process will take place in New York and Los Angeles early in the New Year.

Major studios are lining up for Mr Markle to treat their films. Sitting on the bottom shelf of a bookcase in his office in Toronto's Soho Street is a copy of a full-length black and white classic from an acclaimed novel. A major studio wants Vidcolor to turn it into colour, but wants no one to know it has been done.

"They want it shown as if it were originally made as a colour film," said Mr Markle.

The trademark of the process is "Colorization." Mr Norman Glick, president and large shareholder of HRS Industries says: "The word colorization will be to video what Technicolor was to film and Coca-Cola to soft drinks."

May be. Colorization is still in its infancy. Mr Markle and Mr Glick have evidence that a market exists, but a statement of material facts filed with the Vancouver Stock Exchange in September for the raising of C$2.2m and warrants to raise a further C$3.5m in March had a cautionary note. "There is no evidence this process is economically feasible," the document stated.

Vidcolor and HRS are convinced it is. HRS Industries and its affiliate, Hal Roach Studios, paid C$2.5m this year for 75 per cent of Vidcolor and Mr Markle's sister company, Mobile Image, a production studio company whose facilities are needed to complete the colorization process.

So far C$600,000 has been absorbed in research and development. A first production line is expected to be in operation in the first quarter of next year and five lines by 1985. Vidcolor at the moment is little more than a research outfit. Once colorization gets under way: "Hang on to your hair," says Mr Glick. The process, he estimates, will produce revenues of C$3m to C$5m per line per year.

In the year ended March 31 1983 HRS Industries made a loss before extraordinary items of C$463,000 on revenue of C$1.12m. HRS is 70 per cent owned by Mr Norman Glick, his brother, Mr Earl Glick, and their publicly quoted oil company, Stampede Resources. For HRS, Vidcolor could be either what Hollywood dreams are made of, or a box office flop.

HRS's equivalent of Greta Garbo is its 72 per cent interest in Hal Roach Studios Incorporated, which has more than 1,500 black and white titles including the Laurel and Hardy and Little Rascals library. Laurel and Hardy has a cult following. In colour, Mr Glick believes it will gain a new audience.

Mr Markle had been toying with the idea of converting black and white films to colour videotape ever since the American firm he worked for was involved in producing colour television pictures of the Apollo moon shot programme for Nasa. It was Mr Glick's backing and the Hal Roach film library, which got the project off the ground.

Mr Glick explained: "Wilson said: 'What would you say if I could turn some of that library into colour?' I said: 'Right. Let's do it.' That was two and a half years ago."

Mr Glick provided the money, Mr Markle the expertise. The Hal Roach library provides a start, but if the process is successful, the video world is Vidcolor's oyster.

In North America alone, there are 17,000 black and white motion pictures and 1,400 black and white television series. In addition there are over 30,000 black and white films elsewhere which could be colourised.

Television audiences are already being fed with re-runs of "I Love Lucy" and "Sergeant Bilko." If one network or cable system starts running these oldies in colour, others are going to be pushed to follow suit.

If there is an irony in all this, it is that viewers will not see the original colours of the actors and background in the old films. "Make-up in Laurel and Hardy was predominantly green," said Mr Markle. The green gave the right kind of shade to work well in black and white, but who wants to see Laurel and Hardy with monster colour faces? In any case it is not possible to read from the black and white how the original colours would have looked—even with a computer.

The art director in the colourisation process will choose colours and face tones appropriate to the place and season. The colour, in fact, will be a fake.

Was Humphrey Bogart white with fear or red with rage in this final scene in Casablanca? We'll never really know, but the computer painting process will give the film a more colourful image

HEAT

Hazardous temperature measurement

TEMPERATURE measurement can be hazardous where there are explosive gases, high voltages or microwave beams. Asea, the Swedish engineering giant, has developed a temperature sensor which combines optical fibre technology with semiconductors to yield an intrinsically safe probe.

It consists of a crystal of the semiconductor material gallium arsenide bonded to the end of a fine optical fibre. Asea claims this probe can be inserted safely into almost any industrial environment.

A beam of light from a light emitting diode within the instrument is transmitted along the fibre to the crystal which absorbs the light and re-emits light back along the same fibre.

The distribution of colours in the emitted light is a function of the temperature of the crystal; special circuits in the instrument detect some of this emitted light and use it to determine the temperature of the probe head.

The gallium arsenide tip will measure temperatures between 0°C and 200°C with an accuracy of 1°C. More from Asea (UK) on 01-467 9119.

OFFICE OF NAVAL RESEARCH FUNDS UK UNIVERSITIES

How the U.S. supports British research

AN ARM of the U.S. defence machine is helping fund basic research in some of Britain's universities. It is the Office of Naval Research which this year has provided grants worth £400,000 to more than a dozen universities in Britain including Leeds, Cambridge, Manchester, Essex, Swansea and the City of London Polytechnic.

Some of the projects include investigation of the air/sea process which involves the effect of ocean currents on winds. Others deal with material science, heat transfer characteristics and radar.

The UK arm of the U.S. Office of Naval Research is manned by U.S. academics of international standing in their fields who take up to two years' sabbatical from their university careers. With such a background, these scientists are able to evaluate the quality of work being carried out all over the world, talk directly with foreign scientists and report their findings back to the ONR in the U.S. Usually they have had some involvement with the ONR before. Most have had their own research projects funded by the organisation.

For example, Dr Jim Daniel, who took up a two year post as Scientific director of the London office, comes from the University of Texas. He has been supported by the ONR since the late 1960s. His specialist field is in numerical analysis. This is the creation, analysis, and efficient implementation of ways of carrying out scientific calculations on computers. He has concentrated on differential equations.

The Office of Naval Research was set up in 1946 and predates any other U.S. government backed research organisation including the National Science Foundation, air force and army research organisations. Dr Daniel said that the London office of the ONR was founded to bridge the communications gap between Britain and the U.S. One of its first roles was to collect previously unreported information on scientific progress in Europe and transmit it back to the U.S. and this is still its major role. It is just a small part of the U.S. Department of the Navy and uses civilian staff extensively.

Unlike similar military research organisations in the UK, the ONR concentrates only on basic research which may, ultimately have some relevance to the navy.

This means that the research emphasis is on areas such as large scale computing, solid state physics, radar, chemistry, environment studies, corrosion, laser physics, power sources, directed energy and communications.

About 70 per cent of its funding, some U.S.$200m, goes towards its contract research, but only about £2m is spent in Europe. ONR also supports three of its own laboratories, the largest being the Naval Research Lab based at Arlington, Virgina. It gets U.S.$70m from the ONR. It also sells its research services to other government departments including the Department of Energy.

As well as funding basic research the ONR is looking for information about scientific work worldwide. Through staff at its two overseas offices in London and Tokyo it keeps abreast of developments. Scientists seconded to these bureaux spend half their time travelling around the major universities. They then write reports, which are published in a monthly bulletin which is circulated to 6,000 people in the U.S. It is not generally available to foreign organisations.

WORLD STOCK MARKETS

Indices

NEW YORK

DOW JONES

	Dec. 9	Dec. 8	Dec. 7	Dec. 6	Dec. 5	Dec. 2	1983 High	1983 Low	Since C'mpil't High	Since C'mpil't Low
● Industr'ls	1278.88	1281.89	1273.78	1268.51	1270.58	1265.24	1287.20 (29/11)	1027.04 (3/1)	1287.20 (29/11/83)	41.22 (2/7/32)
H'me Bnds	69.98	70.26	70.17	70.32	70.55	70.38	77.84 (6/5)	60.85 (3/8)	—	—
Transport.	604.81	608.28	609.12	602.68	605.88	605.28	612.57 (22/11)	434.24 (3/1)	612.57 (22/11/83)	12.32 (8/7/32)
Utilities	135.91	135.02	134.20	135.96	134.38	134.87	140.70 (31/10)	119.51 (3/1)	163.32 (20/4/69)	10.5 (28/4/42)
TradingVol 000's	99,280	96,530	105,870	89,098	88,330	85,980	—	—	—	—

● Day's high 1268.09 (1278.15) low 1252.03 (126.91)

	Dec. 2	Nov. 25	Nov. 18	Year ago (Approx)
Indust'l div. yield %	4.45	4.40	4.49	6.36

STANDARD AND POORS

	Dec. 9	Dec. 8	Dec. 7	Dec. 6	Dec. 5	Dec. 2	1983 High	1983 Low	Since Cmpil'n High	Since Cmpil'n Low
Indust'ls.	185.90	185.86	188.82	186.40	186.71	186.21	194.84 (10/10)	164.95 (3/1)	194.84 (10/10/83)	3.62 (30/6/32)
Comp's'te	165.08	165.20	166.91	165.47	165.77	165.44	172.65 (10/10)	138.34 (3/1)	172.65 (10/10/83)	4.40 (1/6/32)

	Dec. 7	Nov. 30	Nov. 23	Year ago (Approx)
Indust'l div. yield %	3.72	3.72	3.97	4.49
Indust'l P E ratio	13.55	14.43	14.45	10.90
Long Gov. Bond yield	11.68	11.49	11.49	10.57

N.Y.S.E. ALL COMMON

Dec. 9	Dec. 8	Dec. 7	Dec. 6	1983 High	1983 Low
95.40	95.45	95.86	95.61	99.63 (10/10)	80.92 (24/1)

Rises and Falls

	Dec. 6	Dec. 8	Dec. 7
Issues Traded	2,018	2,010	2,023
Rises	677	642	884
Falls	890	980	733
Unchanged	451	388	406
New Highs	24	46	61
New Lows	53	32	31

MONTREAL

	Dec. 9	Dec. 8	Dec. 7	Dec. 6	1983 High	1983 Low
Industrial	442.50	445.26	448.23	448.96	498.90 (26/9)	351.18 (4/1)
Combined	425.97	428.32	429.83	429.77	441.28 (26/9)	323.12 (4/1)
TORONTO Composite	2531.9	2535.4	2549.2	2556.8	2598.2 (26/9)	1949.8 (4/1)

NEW YORK ACTIVE STOCKS

Friday	Stocks traded	Closing price	Change on day		Stocks traded	Closing price	Change on day
AT&T	6,097,300	63½	−¼	Mid-Sth. Util.	1,028,500	14⅞	+⅛
AT&T ex dis.	5,654,600	19⅜	−⅛	Sears Roebuck	960,700	38¾	−⅛
IBM	1,666,400	122¼	+3¼	Pacific Tel.	942,800	55	+¼
Searle	1,488,300	45¼	−3	Diamond Shmrk	923,800	20	—
Hous Intl.	1,080,100	20⅝	+⅛	St Oil Indiana	898,700	48⅝	−¼

	Dec. 9	Dec. 8	Dec. 7	Dec. 6	1983 High	1983 Low
AUSTRALIA						
All Ord. (1/1/80)	735.8	737.0	736.0	733.5	745.4 (29/11)	487.8 (4/1)
Metals & Mins. (1/1/80)	528.3	542.8	541.5	541.4	614.2 (5/8)	411.8 (4/1)
AUSTRIA						
Credit Aktien (2/1/62)	54.2	(c)	54.45	54.49	59.8 (5/5)	48.48 (15/2)
BELGIUM						
Belgian SE (31/12/65)	130.94	130.49	129.87	128.32	134.43 (1/8)	100.50 (4/1)
DENMARK						
Copenhagen SE (3/1/83)	—	193.79	193.61	197.16	204.22 (15/9)	100.00 (3/1)
FRANCE						
CAC General (31/12/82)	150.6	151.3	150.4	150.0	151.3 (8/12)	96.1 (5/1)
Ind Tendance (31/12/82)	162.2	162.4	161.6	160.7	162.4 (8/12)	98.0 (5/1)
GERMANY						
FAZ-Aktien (31/12/58)	345.24	346.68	345.35	346.72	348.8 (2/12)	241.89 (25/1)
Commerzbank (Dec1953)	1014.3	1023.5	1022.7	1020.0	1031.5 (2/12)	777.9 (25/1)
HONG KONG						
Hang Seng Bank (31/7/64)	858.59	873.86	874.56	881.58	1102.64 (21/7)	690.08 (4/10)
ITALY						
Banca Comm Ital. (1972)	186.46	(c)	185.95	186.57	214.93 (21/3)	160.46 (10/1)
JAPAN(**)**						
Nikkei-Dow (16/5/49)	9448.9	9461.03	9404.99	9438.79	9563.25 (12/10)	7803.18 (25/1)
Tokyo SE New (4/1/68)	698.74	699.61	697.83	699.47	699.61 (8/12)	574.51 (25/1)
NETHERLANDS						
ANP-CBS General (1970)	147.9	148.0	148.0	147.8	148.0 (7/12)	100.1 (4/1)
ANP CBS Indust (1970)	121.2	120.6	120.7	119.8	121.2 (9/12)	83.5 (4/1)
NORWAY						
Oslo SE (4/1/83)	208.93	206.44	203.92	205.76	217.60 (10/10)	99.01 (4/1)
SINGAPORE						
Straits Times (1966)	968.99	954.72	944.60	938.34	997.62 (25/8)	712.29 (5/1)
SOUTH AFRICA						
Gold (1958)	841.7	872.4	854.2	851.8	1099.5 (1/2)	661.4 (1/11)
Industrial (1958)	922.5	922.5	914.1	909.0	968.7 (28/6)	704.8 (3/1)
SPAIN						
Madrid SE (31/12/82)	122.5	(c)	123.40	124.32	129.14 (10/11)	96.82 (11/1)
SWEDEN						
Jacobson & P. (1/1/58)	1520.99	1524.24	1522.21	1522.90	1526.83 (2/12)	886.18 (3/1)
SWITZERLAND						
SwissBankCpn. (31/12/58)	371.0	372.1	371.4	371.5	372.8 (5/12)	294.4 (4/1)
WORLD						
Capital Intl. (1/1/70)	—	181.4	181.6	181.3	185.9 (10/10)	154.3 (5/1)

(**) Saturday Dec 3: Japan Nikkei-Dow 9406.50. TSE 695.09.

Base values of all indices are 100 except Australia All Ordinary and Metals—500. NYSE All Common—50: Standard and Poors—10: and Toronto—1,000: the last named based on 1975. † Excluding bonds. ‡ 400 Industrial. § 400 Industrials plus 40 Utilities, 40 Financials and 20 Transports. c-Closed. u Unavailable.

AUSTRIA

1983 High	1983 Low	Dec. 9	Price %
222	206	Credit'stalt Pfd.	210
370	181	Goesser	382
410	358	Interunfall	410
217	201	Laenderbank	210
400	255	Perlmooser	302
179	145	Steyr Daimler	150
262	171	Veitscher Mag	200

BELGIUM/LUXEMBOURG

1983 High	1983 Low	Dec. 9	Price Frs.
1,435	990	ARBED	1,170
4,750	3,700	Bank Int A Lux	4,700
3,300	2,030	Bekaert B.	3,100
2,090	1,595	Ciment BR	2,055
182	86	Cockerill	170
4,715	3,660	Delhaize	4,610
2,525	1,875	EBES	2,420
6,450	4,460	Electrobel	6,000
2,900	1,950	Fabrique Nat	1,950
3,200	2,710	GB Inno BM	3,120
2,425	1,450	GBL (Brux)	2,240
3,095	1,740	Gevaert	3,095
5,080	3,600	Hoboken	4,925
2,000	1,720	Intercom	1,880xr
6,510	4,300	Kredietbank	5,900
9,250	4,300	Pan Hldgs.	9,050
6,040	4,610	Petrofina	5,820
7,850	5,910	Royale Belge	7,150
3,000	2,305	Soc. Gen. Banq	2,860
2,025	1,200	Soc. Gen. Belge.	1,645
5,270	3,755	Sofina	5,180
3,460	2,180	Solvay	3,350
3,500	2,645	Tractionel	3,250
4,280	2,620	UCB	4,115
4,400	2,210	Vieille Mout.	3,330

DENMARK

1983 High	1983 Low	Dec. 9	Price %
556.4	339.6	Aarhus Olie	410
320	160	Andelsbanken	276
598	321	Baltica Skand	510
300	178.6	CopHandelsbank	277
691	296.6	D. Sukkerfab	646xr
322.6	197	Danske Bank	297
188	88.6	East Asiatic	137
1,350	650	Forenede Brygg.	1,320
298	148	Forenede Damp.	173
557	176	GNT Hldg.	530
765	270	I.S.S.B.	700
650	297	Jydske Bank	547
3,435	1,935	Novo Ind.	3,185
324	183.4	Privatbanken	275
335	157.6	Provinsbanken	298
324.6	170	Smidth (FL)	256
1,078	583	Sophus Berend.	940
514	97.2	Superfos	489

CANADA

1983 High	1983 Low	Stock	Dec. 9
[illegible]	[illegible]	[illegible]	[illegible]

ITALY

1983 High	1983 Low	Dec. 9	Price Lire
[illegible]	[illegible]	[illegible]	[illegible]

NETHERLANDS

1983 High	1983 Low	Dec. 9	Price Fls
[illegible]	[illegible]	[illegible]	[illegible]

NORWAY

1983 High	1983 Low	Dec. 9	Price Kroner
[illegible]	[illegible]	[illegible]	[illegible]

AUSTRALIA

1983 High	1983 Low	Dec. 9	Price Aust. $
[illegible]	[illegible]	[illegible]	[illegible]

SINGAPORE

1983 High	1983 Low	Dec. 9	Price $
[illegible]	[illegible]	[illegible]	[illegible]

SWEDEN

1983 High	1983 Low	Dec. 9	Price Kronor
[illegible]	[illegible]	[illegible]	[illegible]

FRANCE

1983 High	1983 Low	Dec. 9	Price Frs.
[illegible]	[illegible]	[illegible]	[illegible]

GERMANY

1983 High	1983 Low	Dec. 9	Price DM
[illegible]	[illegible]	[illegible]	[illegible]

SWITZERLAND

1983 High	1983 Low	Dec. 9	Price Frs.
[illegible]	[illegible]	[illegible]	[illegible]

HONG KONG

1983 High	1983 Low	Dec. 9	Price H.K.$
35.25	16.5	Bank East Asia	19.1
0.87	0.87	Carrian Invest.	0.87
10.9	5.7	Cheung Kong	7.15
17.0	9.9	China Light.	11.6xc
3.30	1.27	Hang Lung Devel.	1.38
64.5	28.9	Hang Seng Bank.	37
6.35	4.4	HK Electric	5.4
4.60	2.47	HK Kowloon Wh.	3.57
5.00	2.25	HK Land.	2.8
8.77	2.4	HK Shanghai Bk.	7.0
39.75	28.5	HK Telephone	34.5
16.3	8.00	Hutchison Wpa.	13.9
16.1	7.9	Jardine Math	11.1
3.75	2.00	New World Dev.	2.67
6.0	2.22	Orient O'seas.	2.67
5.1	2.5	O'seas Trust Bk.	2.7
7.25	4.05	SKH Props.	4.8
17.2	8.15	Swire Pac A.	14.4
4.10	2.32	Wheel'k Mard A.	2.9
2.40	1.55	Wheel'k Marit'e	1.73
1.93	1.12	World Int. Hldgs.	1.5

JAPAN

1983 High	1983 Low	Dec. 9	Price Yen
1,130	805	Ajinomoto	1,020
2,780	1,610	Alps Electric	2,590
968	515	Amada	962
412	262	Asahi Chem	388
680	510	Asahi Glass	680
[illegible]	[illegible]	[illegible]	[illegible]

SOUTH AFRICA

1983 High	1983 Low	Dec. 9	Price Rand
[illegible]	[illegible]	[illegible]	[illegible]

SPAIN

1983 High	1983 Low	Dec. 9	Price Pts. %
[illegible]	[illegible]	[illegible]	[illegible]

NOTES:—Prices on this page are as quoted on the individual exchanges and are last traded prices. § Dealings suspended. xd Ex dividend. xc Ex scrip issue. xr Ex rights. xa Ex all.

AMERICAN STOCK EXCHANGE CLOSING PRICES

Continued from Page 19

12 Month High	12 Month Low	Stock	Div.	Yld.	P/E	Sls 100s	High	Low	Close Quote	Ch'ge Prev. Close
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

AUTHORISE UNIT TRUSTS

FT UNIT TRUST INFORMATION SERVICE

INSURANCES

Authorised Units—continued

Atlanta Unit Managers Ltd
1 Founders Ct, Lothbury, EC2. 01-600 8664

Jan Far East	48.7	52.4	−0.2	1.00

Baillie, Gifford & Co Ltd
3 Glenfinlas St, Edinburgh 031-225 2581

JanExNv23	147.2	155.1	...	0.32
IntEx*Dec7	235.5	250.5	...	1.44
BGPPN*D15	214.2	225.5	..	1.51

†Next dealing day.
*Unauthorised.

Equity & Law Un Tst Mngrs (a) (b) (c)
Amersham Rd, High Wycombe. 0494 33377

Euro Tst Acc	63.3	68.0	−0.4	1.34

Robert Fleming & Co Ltd
8 Crosby Square, EC3A 8AN. 01-638 5858

AmExFd*	£227.49	283.54	..	0.82
JapExFd*	£169.65	174.95		1.09

Next subscription day Dec 16 1983
*Fleming American Property Unit Trust
Latest issue price (15.11) US$10.621.
Units are issued on Feb 15, May, Aug, Nov.
*Fleming Property Unit Trust.
Latest issue price (25.12) £2.069
Units are issued on March 25, June 24, Sept 29 & Dec 25.
*Unauthorised.

Guardian Royal Ex Unit Mngrs Ltd (a)
Royal Exchange EC3V 3LS 01-638 2020

Gilt & Fixed	116.1	120.6	−0.8	9.43
Growth Eq	103.9	111.8xd	−0.6	2.43
Guardhill	186.1	192.8	−0.6	3.30
Nth Amer	98.0	105.4	−0.7	1.71
Pacific	110.2	118.6	−0.4	0.29
Prop Shares	111.7	120.2	−0.5	1.93
Small Cos	115.1	123.4	+0.1	1.94

H.B.L. Unit Trust Mngrs Ltd (a) (c) (g)
Premier NT Admin, 5 Rayleigh Rd, Hutton, Brentwood, Essex 0227-227300

Smllr Cos Tst	53.7	57.1	+0.1	3.2
Nth Amer	49.5	52.7xd	−0.2	1.97
Japan Far Tst	55.7	59.3	−0.6	0.78
Scandinvn Tst	48.7	51.8	−0.8	1.90

Hexagon Services Ltd
4 Gt St Helens, London EC4P 3EP. 0708 45322

Aust First	113.4	119.4	....	2.30
Brewin Cap	87.2	91.8	....	0.57
Brewin Int	79.3	83.5	..	3.76
Canada Grw	113.3	121.9		0.93

Lawson Fund Managers Ltd (a) (c) (g)
43 Charlotte Sq, Edinbgh 2. 031-225 6001

Chart Sq Fd	57.5	50.5	...	4.4
Pen Shr Fd	14.1	15.1	..	1.9
Aust & Pac	8.6	9.5	.	0.6
High Yield	20.0	21.5xd	..	11.5
Do Accum	21.5	23.0xd	..	11.5

London & Manchester (Tst Mgmt) Ltd
72-80 Gatehouse Rd, Aylesbury 0296 5941

Gen Tst	24.4	26.4	+0.2	4.32

MGM Unit Managers Ltd
MGM House, Heene Road, Worthing 01-623 8211

High Inc	130.9	140.7	−0.2	6.45
(AccumUts)	137.1	147.4	−0.2	6.45
UK Growth	124.8	134.2	−0.2	3.12
(AccumUts)	126.4	135.9	−0.2	3.12

MLA Unit Trust Management Ltd
Old Queen St, SW1A 9JG. 01-222 8576

MLA Uts	185.6	198.0	...	2.70
MLA Int	30.3	31.8		0.79

The Money Market Trust
63 Qn Victoria St, EC4N 4ST. 01-236 0952

7 Day Fund	—	—	..	8.76
Call Fund	—	—		8.69

*Unauthorised—Sterling Deposit Fund.

Scottish Unit Managers Ltd
29 Charlotte Sq, Edinburgh 031-226 4372

Pacific Fund	27.6	29.9	..	0.30
World Growth	24.2	26.2xd	−0.1	2.27
Nth Amer	25.5	27.6	−0.1	0.36
Income Fd	24.4	26.4xd	−0.7	5.99

Offshore & Overseas—continued

Actibonds Investment Fund SA
37 rue Notre Dame, Luxemb'rg. Tel 47971

Actibonds In	—	$19.93	....	—

Alliance Capital Management Intl Inc
62 63 Queen St, London EC4. 01-248 8881
Alliance International Dollar Reserves
Distribution Nov 22-30 (0.002088) (8.83% pa)

HealthCrDec7	—	$8.71	...	—
Tech'logy Dec7	—	$22.08	...	—
Quser Dec7	—	$48.68	...	—

Aries Fund Managers Ltd
PO Box 284 St Helier, Jersey. 0534 72177

SterlFdInt	£10.69	10.74	....	—

Bamford Brandt Guernsey Mngt Ltd
PO Box 71, St Peter Port, Guernsey. 0481 26541

Tech&Coms	£7.92	8.40	....	—
IntGrowth	$16.90	18.01	....	—

Brown Shipley Tst Co (Jersey) Ltd
PO Box 583, St Helier, Jersey. 0534 74777

StlgCapital	£16.55	16.56	+0.01	—
IntCurrency	£1.10	1.16	....	—
IntBondInc	$10.43	10.99	....	—
IntBondAc	$10.43	10.99	....	—

CAL Investments (IoM) Ltd
16 St Georges St Douglas IoM. 0624 20231

Cal C&C*	83.4	37.8	...	—
CAL Metals	95.8	100.8	....	—
CAL Silver**	239.0	252.8	−12.2	—
CAL Gold**	88.7	93.4	−1.8	—
CAL Copper**	—	—	...	—
CAL Alum**	91.5	96.3	+1.1	—

*Dealing days every Monday.
**Dealings daily.

CAL Investments (Bermuda) Ltd
PO Box 1022, Hamilton, Bermuda. (809-29) 5-5950

CAL CTR Fd	68.2	71.6	....	—

Dealing days every Monday.

Capital Preservation Fund International
14 Rue Aldringen, Luxembourg 1118

Cap Press Fd	—	$10.04	....	—

Commodity Advisory Svcs (IoM) Ltd
48 Athol St, Douglas, IoM. 0624-20845

Com&FFAc	81.4	84.73	....	—
Com&FFd	81.40	84.79	....	—

Next dealing date Dec 19.

Citibank (CI) Ltd "Citifunds"
Green St, St Helier. 0534-70334

U.S.$ Fd	$10.44	+0.002	—
£ Sterling Fd	£5.217	+0.001	—
SwFranc Fd	SwFr 20.231	+0.001	—
Jap Yen Fd	Y2052.618	+0.274	—
Deutschmk Fd	DM 20.362	+0.002	—
Managed Fd	$10.153	+0.002	—

" Citicare "

CitiCare Fd Nov 30	9.682	....	—

Dunvest Ltd
PO Box 887, Grand Cayman.

NAV	$172.16	....	—

EBC Trust Company (Jersey) Ltd
1-3 Searle St, St Helier, Jersey. 0534-36331

USSDoSh'tA	1.3063	....	9.03
DoDist	1.0227	....	9.03
Med Cur Sh'tB	1.1217	−0.0032	8.54
Do Dist	0.9334	−0.0027	8.54
Eurobd Long Tm	23.75	....	11.08

Fidelity International
9 Bond St, St Helier, Jersey. 0534-71696

D'llrSvgsTst(z)	107.74	....	8.95
AmValCmPf$3‡	100.0xd	....	—
AmValsCdm‡	59.34	....	—

‡ Prices at Nov 30.

Forbes Securities Management Co
PO Box 887, Grand Cayman, BWI. London Agents 01-839 3013

Gold Inc	$9.49	10.00	....	12.9
Gold Acc	$7.42	7.82	....	—
Dollar Inc	$9.17	9.51	....	13.4

Framlington Overseas Fund Mngt Ltd
PO Box 71, St Peter Port, Guernsey. 0481 26541

O'seas&Gth	52.0	54.7xd	....	4.0
O'seas&Gth	$75.2	79.3xd	....	4.0

GRE International Invest Mngrs Ltd
PO Box 194, St Helier, Jersey. 0534 27441

ManCurFd	—	10.41	....	—

Grieveson Mngt (CI)—Barrington Fund
30 Bath St, St Helier, Jersey. 0534-75151

IntIncDec8	99.0	105.3xd	+1.3	4.88

Grindlay Henderson Mngt Ltd
PO Box 414, St Helier, Jersey. 0534-74248

Mgd Fd	£10.7173	11.2532	−0.0111
Mgd Acc	£10.1588	10.6677	−0.0105
Stlg Fd	£10.3709	....	+0.0045
Stlg Acc	£10.33	....	+0.0049
U.S. $ Fd	$20.7336	....	+0.0103
U.S. $ Acc	$20.6620	....	+0.0103
DM Acc	DM 50.7506	....	+0.0104
SwFrAcc	SwFr50.8344	....	+0.0065
Yen Acc	Y5101	..	+1

Guinness Mahon Intl Fund (Guernsey)
PO Box 188, St Peter Port, Guernsey. 0481 23506
Currency Deposit Shares

Dollar	$20.339	+0.005	—
Sterling	£10.153	+0.002	—
Yen	Y5047.189	−0.649	—
Deutschmk	DM 50.389	+0.006	—
Swiss Franc	SwFr 40.127	+0.001	—

IGF Management Services Inc
c/o Registrars PO Box 1044 Cayman Is, BWI

IncGoldFd	$62.46	65.58	... —
Optima	—	—	.... —

Jardine Fleming & Co Ltd
46th Floor, Connaught Centre, Hong Kong.

Curr Bd	$12.92	—	....	9.5
(Accum)	$18.26	—	...	—
Asean	$9.52	—	....	—
(Accum)	$9.52	—	...	—
American	$9.04	—	....	—
(Accum)	$9.04	—	....	—
Mgd Curr	$10.07	—	....	9.50
(Accum)	$10.07	—	....	9.50

Lazard Brothers & Co (Jersey) Ltd
PO Box 108, St Helier, Jersey, CI. 0534 37361

CoGB d	$1,389.87	1406.53	....	11.12
LazBrFarE	$14.69	15.63	....	1.00
O'hes Bd	$10.30	10.35	....	6.50
N Am Fd	$10.58	11.26	....	—

Lloyds Bank International, Geneva
PO Box 438, 1211 Geneva 11 (Switzerland)

L I Dollar	$99.1	102.3	....	10.3
L I Growth	SF992.0	960.5	....	1.5
LI Income	SF283.0	294.0	...	6.8
L I Pacific	SF108.5	114.6	....	1.3

Lloyds Intl. Money Market Fund Ltd.
PO Box 136, St Peter Port, Guernsey. 0481 24983

Sterling Class	£10.076
Dollar Class	$20.031

Next dealing day Dec 14.

Insurances—continued

Prudential Pensions Ltd
Holborn Bars, EC1 2NH. 01-405 9222
Pru-Link Retirement Plan

Managed Fd	149.0	155.3	....	—
Cash Fund	114.7	119.5	....	—

St George Assurance Co Ltd
The Priory, Hitchin, Herts. 0462 57161

Managed Fd	104.7	110.3	...	—
Universal Fd	103.0	108.5	....	—

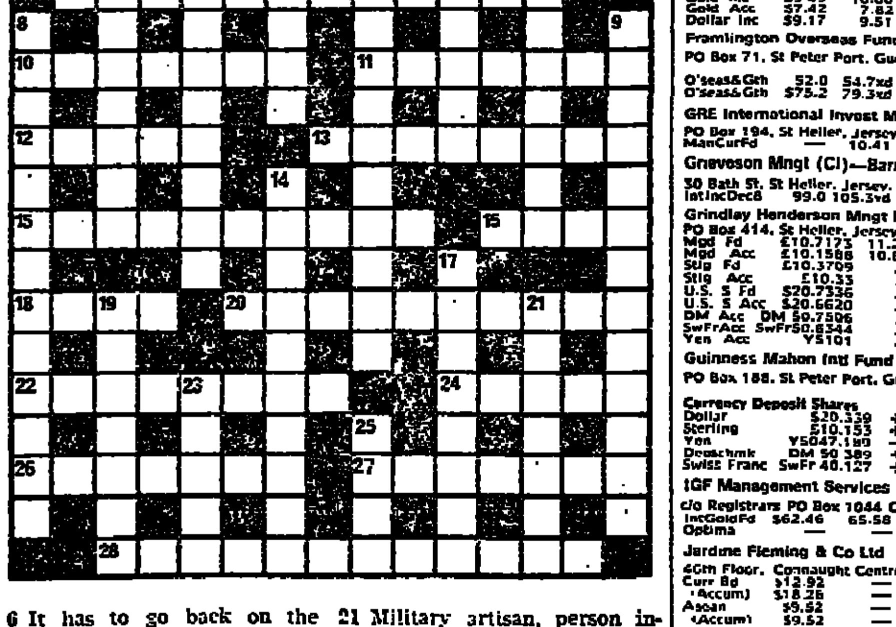
TSB Life Ltd
PO Box 3, Keens House, Andover, Hants SP10 1PG.

Managed Fd	107.5	113.2	−0.1
Property Fd	98.6	103.9	...
Fixed Int Fd	102.4	107.9	−0.6
Money Fd	98.6	103.9	....
Equity Fd	117.3	123.5	+0.8

Windsor Life Assurance Co Ltd
Royal Albert Hse, Sheet St, Windsor

N Amer Fd	207.3	218.2	....
FutAssGth	86.0(A)	91.0(B)	....
FutAssPen	—	53.40	....
Far East Fd	130.0	136.9	....
Index Linked	94.3	99.4	....

F.T. CROSSWORD PUZZLE No. 5,291



ACROSS

1 & 10 Grahame's bank account? (3, 4, 2, 3, 7)
11 Toe Eric fractured can be set (7)
12 Dues, it is said, of church ceremonies (5)
13 Lateral direction of border roads (8)
15 Windy current from old bass instrument, in E (10)
16 This piece of burlesque requires singular outfit (4)
18 Members of the Formica Building Society? (4)
20 A late cramp developing in horse's foreleg (10)
22 Leaving the land? Try sick-bays! (8)
24 Th' old north form (5)
26 Describing peninsula that could be much colder after Sunday (7)
27 Runners in pairs who help to keep race going? (7)
28 Pop number for the older man? (6-6)

DOWN

2 Leather artefact for Walther? (7)
3 Cops, we hear, thrown off—here is a place to hide (8)
4 Cosy place with fitted tables (4)
5 Kind of music for accompanying? (10)
6 It has to go back on the tenth (5)
7 Romans' loan to Anthony set aside (7)
8 9 on guard, perhaps? (13)
9 Seven Stars lie turning—showing free-turning capability (13)
14 At 22.00 hrs, take steps to see how many turn up (10)
17 Snatch some glee? (4-4)
19 One of the many fortune-tellers in China (3-4)
21 Military artisan, person inside jetty (7)
23 Like Quixote—at it about fifty! (5)
25 Complaint of cattle (4)

The solution to last Saturday's prize puzzle will be published with names of winners next Saturday.

INSURANCE & OVERSEAS MANAGED FUNDS

Black Horse Life Ass. Co. Ltd.
71, Lombard St., EC3. 01-623 1288

Black Horse Man. Fd.	240.45			—
Managed Inv. Fd.	162.44	170.99	.....	—
Property Fd.	151.85	159.89	.....	—
Fixed Interest Fd.	248.37	256.12	.....	—
Cash Fd.	136.90	144.10	.....	—
Income Fd.	178.18	187.56	.....	—
Extra Income Fd.	165.72	174.45	.....	—
Worldwide Growth Fd.	228.64	240.66	.....	—
Balanced Fd.	179.70	189.16	.....	—
Small Co's & Recv. Fd.	205.34	216.15	.....	—
Int. Technology Fd.	267.38	281.46	.....	—
Nth. Amer. & Gen. Fd.	165.50	174.22	.....	—
Energy Int. Fd.	103.27	108.71	.....	—
Pacific Basin Fund	142.95	150.48	.....	—

British National Life Assurance Co. Ltd.
Harlands Rd, Haywards Heath. 0444 414111

Managed	114.4	120.4	+0.7	—
Property	118.0	124.2	+3.5	—
Equity	117.9	124.1	+0.8	—
International	126.5	133.2	−0.6	—
Fixed Interest	103.3	108.7	.....	—
Deposit	100.0	105.2	+0.1	—
Managed Pen. Cap.	114.6	120.6	+0.8	—
Property Pens. Cap.	119.2	125.5	+4.1	—
Equity Pens. Cap.	112.6	118.6	+0.8	—
Intnl. Pens. Cap.	130.4	137.3	−1.1	—
Fixed Int. Pens. Cap.	100.6	105.9	−0.1	—
Deposit Pens. Cap.	97.6	102.7	.....	—

Canada Life Group
2-6, High St., Potters Bar, Herts. P. Bar 51122

Equity Gth Nov 30	97.1		.....	—
Retd. Fed. Nov 6	255.4		.....	—
Managed Pen Fund	184.7	194.5	.....	—
Property Pen Fund	115.1	121.2	.....	—
Index Lnkd Pen Fund	111.8	117.7	.....	—
Managed	123.7	130.3	−0.3	—
Property	104.5	110.0	−0.1	—
Gilt and Fixed Interest	108.0	113.7	−0.5	—
Index-Linked	98.4	103.6	+0.2	—
Equity	122.6	129.1	−0.7	—
Cash	104.5	110.1	.....	—
Midland Bk. Unit Tst.	120.6	127.0	−0.6	—

G.T. Management Ltd.
16 Finsbury Circus, Lond. EC2M 7DJ. 01-628 8131

G.T. Plan Bond Fund	126.1	132.8	+0.1	—
GT Pln High Yld Fnd.	125.5	132.1	+2.5	—
GT Plan Far East Fnd	120.6	127.0	−0.2	—
GT Plan N. Am Fd.	140.5	147.9	−0.5	—
GT Pln UK&G.E. Fnd	139.8	147.2	+7.5	—
GT Pln Wrldwde Fnd.	139.1	146.5	−1.2	—
GT Pension Bnd Fnd.	136.6	143.8	+0.1	—
GT Pen High Yld Fd.	143.1	150.7	+2.9	—
GT Pen Far East Fd.	147.8	155.6	−0.4	—
GT Pen N. Am. Fd.	205.9	216.8	−0.9	—
GT Pen UK & G.E. Fd.	162.5	171.1	+2.9	—
GT Pen Worldwide Fd.	148.5	156.4	−1.5	—

Prices for Accum. Units only.

Assicurazioni GENERALI S.p.A.
117, Fenchurch St., EC3M 5DY. 01-488 0733

Intl. Managed Bond	166.9	175.7	.....	—

General Portfolio Life Ins. C. Ltd.
Crossbrook St., Cheshunt, Herts. Waltham X 31971

Portfolio Fd. Acc.	256.0	+0.9	—
Portfolio Fd. Init.	210.4	+0.6	—

See adjacent page Mon-Fri and Stock Exchange Dealings page Sat

Gresham Unit Ass. Ltd.
2-6, Prince of Wales Rd. B'mouth. 0202 767655

Managed Fd.	278.2	293.2	+0.2	—
Money Fd	156.3	164.6	+0.2	—
Equity Fd.	257.2	270.9	−0.7	—
Fixed Int. Fd.	119.8	126.2	+0.1	—
Property Fd	173.0	182.3	.....	—
Managed Pen. Fd.	256.5	270.1	.....	—
Equity Pension Fd	186.0	196.0	.....	—
Fixed Int. Pen. Fd.	166.2	175.1	.....	—
High Yield Pen. Fd.	163.8	172.6	.....	—
Money Pension Fd	129.2	136.0	.....	—
Property Pension Fd	128.2	135.1	.....	—
American & Gen. Fd.	259.7	273.7	+0.3	—
Income Fd	189.9	200.1	+1.6	—
Int'l. Growth Fd.	277.0	291.9	+0.7	—
Capital Fund	209.9	220.8	+1.2	—

OFFSHORE AND OVERSEAS

NOTES

Prices are in pence unless otherwise indicated and those designated $ with no prefix refer to U.S. dollars. Yields % (shown in last column) allow for all buying expenses. a Offered prices include all expenses. b Today's prices. c Yield based on offer price. d Estimated. g Today's opening price. h Distribution free of UK taxes. p Periodic premium insurance plans. s Single premium insurance. x Offered price includes all expenses except agent's commission. y Offered price includes all expenses if bought through managers. z Previous day's price. ♦ Guernsey gross. ⊕ Suspended. ♦ Yield before Jersey tax. † Ex-subdivision. ‡‡ Only available to charitable bodies. § Yield column shows annualised rate of NAV increase.

FT LONDON SHARE INFORMATION SERVICE

BRITISH FUNDS

"Shorts" (Lives up to Five Years)

Interest Due		Stock	Price £	Last xd	Yield Int.	Yield Red.
15Jul	15Ja	Funding 5½pc '82-84‡‡	99⁷⁄₁₆xd	8.6	5.52	8.96
20Aug	20F	Exch. 11¼pc 1984	100¾	14.7	11.22	9.08
22N	22May	Exchequer 14pc 1984	101¹⁹⁄₃₂	17.10	13.74	9.50
19O	19Jun	Exch. 3pc 1984	97xd	14.11	3.09	9.04
26Mar	26S	Treasury 12pc 1984	101½	22.8	11.80	9.62
22Aug	22F	Treasury 15pc 1985	105⅛	18.7	14.26	10.18
22S	22Mar	Exch. 12pc Cnv. '85	102¼	16.8	11.73	9.99
21N	21My	Treasury 3pc 1985	93¾	17.10	3.20	7.61
15Jan	15Jul	Treasury 11½pc 1985	102¼xd	8.6	11.27	10.11
3 Mar	3 Sept	Treas 8¾pc Cnv '85	98⅛	28.7	8.92	9.96
22May	22N	Exch. 12¼pc 1985	103⅛	17.10	11.89	10.41
25 Aug.	25F	Exch. 11¾pc '86	102⅛	19.7	11.50	10.56
—		Treas 10pc Cnv 1986	100¾	—	9.93	9.59
19N	19May	Treasury 3pc 1986	88⅝	13.10	3.39	8.28
19 Nv	19 My	Exch. 10½pc Cv '86	100⅜	13.10	10.46	10.32
12D	12Jun	Treasury 12pc '86	102½xd	7.11	11.71	10.81
10Ja	10Jul	Treasury 8¼pc '84-86‡‡	97⅛xd	5.12	8.73	9.69
14 Jan	14 Jy	Treas. 12¼pc '86 Cnv.	109xd	7.6	11.24	8.34
29Apr	29Oct	Exch. 14pc 1986	107⅜	22.9	13.04	10.94
May 21	—	Exch 2½pc 1986 ●	84¾	—	2.95	8.46
22Jul	22Jan	Exch. 13¼pc 1987	105½	15.6	12.56	11.20
10 Fb	10 Ag	Treas 10¼pc Cnv '87	98⅝	—	10.39	10.75
24 Fb	24 Aug	Exchequer 2½pc 1987	83⅛	18.7	3.01	8.61
Oct 6	Apr 6	Exch. 10½pc 1987	98¾	1.9	10.63	10.93
1N	1May	Funding 6½pc '85-87‡‡	91⅝	26.9	7.09	9.45
—		Treas 10pc 1987	97⅛	—	10.25	10.83
14Ja	14Jul	Treasury 3pc 1987	83¼xd	7.6	3.60	8.51
3 May	3N	Treas 12pc 1987	102⅞	27.9	11.67	11.07
26Jul	26Ja	Treasury 7¾pc '85-88‡‡	92⅞	30.6	8.35	9.93
10 My	10 Nv	Exch 10½pc '88	98⅞	4.10	10.63	10.86
—		Treas 9¾pc Conv '88	96⅞	—	10.07	10.64
1Ja	1Jul	Transport 3pc '78-88	80½xd	25.11	3.72	8.24
25Ap	25Oct	Treas. 9½pc '88	94⅞	19.9	10.01	10.89

Five to Fifteen Years

Over Fifteen Years

Undated

Index-Linked

INT. BANK AND O'SEAS GOVT. STERLING ISSUES

CORPORATION LOANS

COMMONWEALTH AND AFRICAN LOANS

1Ja	1Jy	N.Z. 7¼pc 1988-92	80½xd	1.12	8.95	10.68
15Je	15D	Do. 7½pc '83-86	92½xd	1.12	8.08	10.87
—		S. Rhod. 2½pc Non-Ass.	180	—	—	—
10Mar	10Sept	Do. 3½pc 80-85 Asstd.	82	10.8	4.29	14.90
7F	7A	Do. 4½pc 87-92 Asstd.	54	7.7	8.43	14.20
15Ap	15O	Zimbabwe Ann (£100pd)	340	15.9	—	15.70

LOANS

Building Societies

13 Jne	19 Dec	N'wide 11⅜pc 19.12.83	100⅛	16.5	—	—
23 Jan	17 Jly	Do. 11⅞pc 23.1.84	100⅛	17.6	11.86	9.88
13 Feb	7 Aug	Do. 11⅞pc 13.2.84	100¼	8.7	11.85	9.72
19 Mar	14 Sep	Do. 11¼pc 19.3.84	100⅛	15.8	11.21	9.61
9 Apr	5 Oct	Do. 11¼pc 9.4.84	100⅛	5.9	11.22	9.81
30 Apr	30 Oct	Do. 10⅞pc 30.4.84	100⅛	26.9	10.84	10.05
29 May	23 Nov	Do. 10⅞pc 29.5.84	100⅛xd	24.10	10.81	9.46
18 Jne	6 Dec	Do. 10⅞pc 18.6.84	100⅛	7.11	10.81	9.69
4 Jan	9 Jly	Do. 10⁹⁄₁₆pc 9.7.84	100⅛xd	—	10.52	9.45
25 Jan	30 Jly	Do. 10⅞pc 30.7.84	100½	—	10.82	9.99
15 Jan	20 Aug	Do. 11¼pc 20.8.84	100⅝	—	11.18	10.19
29 Feb	3 Sept	Do. 11pc 3.9.84	100½	—	10.95	10.00

LOANS—continued

Public Board and Ind.

Financial

FOREIGN BONDS & RAILS

AMERICANS

CANADIANS

BANKS, H.P. & LEASING

Jan.	July	Cater Allen £1	395xd	28.11	†26.95	—	9.7	—
May	Nov	Charterhouse Gp.	107	19.9	♦st5.4	1.6	7.2	[illegible]
May	Nov.	Clive Dis'nt 20p	41	17.10	†3.2	—	11.2	—
May		Com'zbk DM 10	840	6.5	Q12%	—	5.0	—
March		C'hgn Hbk. Kr100	£19	22.3	Q15%	—	8.5	—
Jan.	Apr.	Dawes (G. R.)	7	25.1	—	—	—	—
May		Deutsche Bank DM50	£80⅛	19.5	Q22%	—	3.4	—
May	Dec	English Assoc.	142	15.8	h2.73	3.8	2.7	13
June	Nov.	First Nat. 10p	66½	974	—	—	—	5
—		Do. Wrrts. 75-83	⅞	—	—	—	—	—
—		♥First Pacific Fin	13½	—	Q8c	2.3	5.0	8
		♥Do. Hldgs.	35	—	Q28c	1.1	6.7	13
June	Dec.	Gerrard Natnl.	232	31.10	h10.0	—	6.2	—
April		Goode D'l Mry 5p	51	21.2	1.0	—	2.8	—
Nov.	April	Grindlays	143	3.10	4.38	3.0	4.4	10
Mar.	Nov.	Guinness Peat	57	28.9	8—	—	—	—
Dec.	July	Hambros 5p	135xd	28.11	5.28	—	5.6	—
Dec.	July	Hill Samuel	328	14.11	†9.1	—	4.1	—
Mar	Oct	Hong Shng $2.50	62	9.7	†Q55c	—	7.8	—
June	Nov.	Jesel Toyn. & Gillett	67	31.10	†5.5	—	11.7	—
Jan.	June	Joseph (Leo) £1	300	15.8	11.25	—	5.4	—
June	Dec.	King & Shax 20p	116	14.11	7.5	—	9.2	—
May	Nov.	Kleinwort B.L.	347	3.10	11.0	—	4.5	—
Aug.	Apr.	Lloyds £1	563	1.8	†24.58	3.8	6.2	4
Mar.	Oct.	Manson Fin. 20p	30	31.10	q1.0	1.1	4.8	[illegible]
Aug.		Mercury Secs.	480	4.7	9.5	—	2.8	—

BANKS—Continued

Hire Purchase, Leasing, etc.

BEERS, WINES & SPIRITS

BUILDING INDUSTRY, TIMBER AND ROADS

CHEMICALS, PLASTICS

DRAPERY AND STORES

ELECTRICALS

ELECTRICALS—Continued

ENGINEERING

FOOD, GROCERIES, ETC

FOOD, GROCERIES—Cont.

HOTELS AND CATERERS

INDUSTRIALS (Miscel.)

INDUSTRIALS—Continued

LEISURE—Continued

MOTORS, AIRCRAFT TRADES

Motors and Cycles

Commercial Vehicles

Components

Garages and Distributors

NEWSPAPERS, PUBLISHERS

PAPER, PRINTING ADVERTISING

PROPERTY

INSURANCES

LEISURE

PROPERTY—Continued

SHIPPING

SHOES AND LEATHER

SOUTH AFRICANS

TEXTILES

TOBACCOS

TRUSTS, FINANCE, LAND

Investment Trusts

INVESTMENT TRUSTS-Cont.

Finance, Land, etc.

OIL AND GAS

OIL AND GAS—Continued

OVERSEAS TRADERS

PLANTATIONS

Rubbers, Palm Oil

Teas

MINES

Central Rand

Eastern Rand

Far West Rand

O.F.S.

Finance

Diamond and Platinum

Central African

MINES—continued

Australians

Tins

Miscellaneous

Dividends Paid		Stock	Price	Last xd	Div Net	C'vr	Y'ld Gr's
—		Admiral Mines	22	—	—	—	—
—		♥Anglo-Dominion	70	—	—	—	—
—		♥Anglo Utd. Dev.	55	—	—	—	—
—		Centennial Minerals	230	—	—	—	—
—		♥Colby Res. Corp.	110	—	—	—	—
Aug.	Feb	Cons. Murch. 10c.	590	4 7	‡060c	1.9	‡
Sept	Feb	Hampton Areas 10p	213	18.7	3.75	2.1	2.4
—		♥Highwood Res.	175	—	—	—	—
May	Aug	Homestake Mining $1	£20¾	2.11	020c	—	0 6
October		Northgate C$1	370	977	—	—	—
Jan.	July	R.T.Z.	593	31.10	t17.0	2.9	4.1
Jan	July	Do 9¾% Cn Ln 95-2000	£130½	31.10	09½%	32.5	7 5
—		♥Sabina Inds. C$1	70	—	—	—	—
—		♥Tara Expln $1	735	—	—	—	—

NOTES

Unless otherwise indicated, prices and net dividends are in pence and denominations are 25p. Estimated price/earnings ratios and covers are based on latest annual reports and accounts and, where possible, are updated on half-yearly figures. P/Es are calculated on "net" distribution basis, earnings per share being computed on profit after taxation and unrelieved ACT where applicable; bracketed figures indicate 10 per cent or more difference if calculated on "nil" distribution. Covers are based on "maximum" distribution; this compares gross dividend costs to profit after taxation, excluding exceptional profits/losses but including estimated extent of offsettable ACT. Yields are based on middle prices, are gross, adjusted to ACT of 30 per cent and allow for value of declared distribution and rights.

- ● "Tap" Stock
- * Highs and Lows marked thus have been adjusted to allow for rights issues for cash.
- † Interim since increased or resumed.
- ‡ Interim since reduced, passed or deferred.
- ‡‡ Principal and interest tax-free to non-residents on application.
- ϕ Figures or report awaited.
- ♥ Not officially UK Listed; dealings permitted under Rule 163(4)(a).
- ✣ USM; not listed on Stock Exchange and company not subjected to same degree of regulation as listed securities.
- †† Dealt in under Rule 163(3).
- ‡ Price at time of suspension.
- ¶ Indicated dividend after pending scrip and/or rights issue: cover relates to previous dividend or forecast.
- ♦ Merger bid or reorganisation in progress.
- ╪ Not comparable.
- ♦ Same interim: reduced final and/or reduced earnings indicated.
- § Forecast dividend; cover on earnings updated by latest interim statement.
- ‡ Cover allows for conversion of shares not now ranking for dividends or ranking only for restricted dividend.
- ★ Cover does not allow for shares which may also rank for dividend at a future date. No P/E ratio usually provided.
- ‖ No par value.

B.Fr Belgian Francs. Fr French Francs. ◆◆ Yield based on assumption Treasury Bill Rate stays unchanged until maturity of stock. a Tax free. b Figures based on prospectus or other official estimate. c Cents. d Dividend rate paid or payable on part of capital, cover based on dividend on full capital. e Redemption yield. f Flat yield. g Assumed dividend and yield. h Assumed dividend and yield after scrip issue. j Payment from capital sources. k Kenya. m Interim higher than previous total. n Rights issue pending. q Earnings based on preliminary figures. s Dividend and yield exclude a special payment. t Indicated dividend: cover relates to previous dividend, P/E ratio based on latest annual earnings. u Forecast dividend: cover based on previous year's earnings. v Subject to local tax. x Dividend cover in excess of 100 times. y Dividend and yield based on merger terms. z Dividend and yield include a special payment: Cover does not apply to special payment. A Net dividend and yield. B Preference dividend passed or deferred. C Canadian. D Issue price. E Minimum tender price. F Dividend and yield based on prospectus or other official estimates for 1983-84. G Assumed dividend and yield after pending scrip and/or rights issue. H Dividend and yield based on prospectus or other official estimates for 1984. K Figures based on prospectus or other official estimates for 1982-83. M Dividend and yield based on prospectus or other official estimates for 1983. N Dividend and yield based on prospectus or other official estimates for 1982-83. P Figures based on prospectus or other official estimates for 1983. Q Gross. T Figures assumed. Z Dividend total to date.

Abbreviations: xd ex dividend; xc ex scrip issue; xr ex rights; xa ex all; xd ex capital distribution.

REGIONAL AND IRISH STOCKS

The following is a selection of regional and Irish stocks, the latter being quoted in Irish currency.

OPTIONS

3-month Call Rates

"Recent Issues" and "Rights" Page 18

CURRENCIES, MONEY and CAPITAL MARKETS

FOREIGN EXCHANGES

Regan comments boost dollar

BY COLIN MILLHAM

The strong differences about interest rates between Mrs Margaret Thatcher, the Prime Minister, and Mr Donald Regan, U.S. Treasury Secretary, underlined the movements of various currencies on the foreign exchanges last week. The dollar moved comfortably above the record levels set in August, and sterling fell to its lowest level ever against the U.S. currency.

While Mrs Thatcher openly attacked U.S. economic policy in a Commons statement Mr Regan said that there was little prospect of lower U.S. interest rates until at least the spring.

This exchange of views coincided with the Geneva meeting of Opec, and doubts about the ability of the cartel to maintain the $29 a barrel reference price for oil. The depressing implications for North Sea oil prices kept the pound nervous for most of the week, and the better than expected third quarter UK current account surplus of £603m failed to lend any lasting support.

Sterling also eased slightly against Continental currencies, but the strongest movements of all major units involved the dollar, which rose to a 10-year high against the D-mark, and to all time peaks against the French franc; Italian lira; Spanish peseta, Danish and Norwegian krone and Swedish krona.

At the beginning of the week the dollar was boosted by rising tension in the Middle East following U.S. air strikes against Syrian positions in Lebanon, and falling unemployment, illustrating recent signs of economic growth. The rise of $1.6bn in U.S. M1 money supply was also more than expected, and the dollar continues to be underpinned by forecasts that this Friday's M1 figure will be about $5bn higher, as rising economic activity feeds through into the money supply figures.

Central banks, including the Bank of England, intervened from time to time in an attempt to stem the dollar's rise. The German Bundesbank sold dollars each day at the Frankfurt fixing, and also acted Tuesday and Friday on the open market, selling a total of around $175m on Friday.

£ in New York

	Dec. 9	Previous
Spot	$1.4370-4385	$1.4380-4390
1 month	0.11-0.12 dis	0.10-0.11 dis
3 months	0.30-0.35 dis	0.27-0.28 dis
12 months	1.27-1.32 dis	1.15-1.23 dis

£ forward rates are quoted in U.S. cents discount.

FORWARD RATES AGAINST STERLING

	Spot	1 month	3 month	6 month	12 month
Dollar	1.4355	1.4367	1.4385	1.4417	1.4481
D-Mark	3.9475	3.9388	3.9188	3.8869	3.8296
French Franc	11.9925	12.025	12.0925	12.2296	12.4521
Swiss Franc	3.1675	3.1538	3.1300	3.0888	3.0150
Japanese Yen	339.5	338.9	337.3	334.8	330.2

EMS EUROPEAN CURRENCY UNIT RATES

	ECU central rates	Currency amounts against ECU December 9	% change from central rate	% change adjusted for divergence	Divergence limit %
Belgian Franc ...	44.9008	45.8836	+2.19	+1.64	±1.5447
Danish Krone ...	8.14104	8.19894	+0.71	+0.16	±1.6425
German D-Mark	2.24184	2.26149	+0.88	+0.33	±1.0642
French Franc ...	6.87456	6.87288	−0.02	−0.57	±1.4052
Dutch Guilder ...	2.52595	2.53452	+0.34	−0.21	±1.4964
Irish Punt	0.72569	0.726468	+0.11	−0.44	±1.6699
Italian Lira	1403.49	1369.44	−2.43	−2.43	±4.1505

Changes are for ECU, therefore positive change denotes a weak currency. Adjustment calculated by Financial Times.

BANK OF ENGLAND TREASURY BILL TENDER

	Dec. 9	Dec. 2		Dec. 9	Dec. 2
Bills on offer	£100m	£100m	Top accepted rate of discount	8.8843%	8.8843%
Total of applications	£315.11m	£469.96m	Average rate of discount	8.8843%	8.8666%
Total allocated	£100m	£100m	Average yield	9.09%	9.07%
Minimum accepted bid	£97.785	£97.785	Amount on offer at next tender	£100m	£100m
Allotment at minimum level	92%	5%			

THE POUND SPOT AND FORWARD

Dec 8	Day's spread	Close	One month	% p.a.	Three months	% p.a.
U.S.	1.4350-1.4440	1.4410-1.4420	0.08-0.13c dis	−0.87	0.25-0.30dis	−0.76
Canad	1.7850-1.7960	1.7950-1.7960	0.06-0.16c dis	−0.73	0.18-0.28dis	−0.51
Nethlnd.	4.39-4.43	4.41½-4.42½	1⅛-⅛c pm	2.71	3⅛-3 pm	2.94
Belgium	79.49-80.05	79.90-80.00	5-15c dis	−1.5	35-45 dis	−2.0
Denmark	14.21-14.30	14.27-14.28	3¾-4¼ore dis	−3.57	8¾-9¾ dis	−2.52
Ireland	1.2600-1.2680	1.2650-1.2660	0.26-0.16p pm	1.99	0.69-0.57 pm	1.99
W. Ger.	3.92-3.95½	3.94-3.95*	1⅛-⅛pf pm	2.86	3⅛-2⅞ pm	3.38
Portugal	186.75-188.25	187.25-187.75	125-335c dis	−14.72	460-975dis	−14.18
Spain	225.30-226.70	226.40-226.60	230-260c dis	−12.96	630-700dis	−11.74
Italy	2375½-2389¼	2387½-2389½	13½-15½ lire dis	−7.28	43½-46½dis	−7.53
Norway	10.97-11.11½	11.10¼-11.11¼	3⅞-4⅞ore dis	−4.32	9⅞-10½ dis	−3.69
France	11.91-11.98¾	11.96¾-11.97¾	3-4c dis	−3.50	9⅞-10⅞ dis	−3.50
Sweden	11.48-11.56½	11.54½-11.55½	2⅛-2⅞ore dis	−2.59	6⅞-7 dis	−2.33
Japan	334¾-338½	337¼-338¼	0.65-0.55y pm	2.1	2.40-2.20 pm	2.72
Austria	27.62-27.82	27.72-27.77	7⅛-5⅛gro pm	2.70	21¼-17¾ pm	2.81
Switz.	3.13¼-3.17⅛	3.16-3.17	1⅝-1⅛c pm	5.21	4¼-3¾ pm	5.0

Belgian rate is for convertible francs. Financial franc 80.95-81.05
Six-month forward dollar 0.54-0.59c dis. 12-month 1.13-1.28c dis
*Closing rate for D-mark on December 7 was 3.93¾-3.94¾

THE DOLLAR SPOT AND FORWARD

Dec 8	Day's spread	Close	One month	% p.a.	Three months	% p.a.
UK†	1.4350-1.4440	1.4410-1.4420	0.08-0.13c dis	−0.87	0.25-0.30dis	−0.76
Ireland†	1.1365-1.1400	1.1390-1.1400	0.25-0.15c pm	1.82	0.69-0.57 pm	1.82
Canada	1.2440-1.2452	1.2445-1.2450	0.03-0.01c pm	0.19	0.09-0.06 pm	0.24
Nethlnd.	3.0620-3.0670	3.0635-3.0645	1.03-0.93c pm	3.83	2.85-2.75 pm	3.65
Belgium	55.40-55.60	55.42-55.44	5-6½ dis	−1.24	19-23 dis	−1.51
Denmark	9.9000-9.9175	9.9000-9.9050	1.40-1.90ore dis	−1.99	1.50-2.00dis	−0.70
W. Ger.	2.7300-2.7400	2.7330-2.7340	0.86-0.81pf pm	3.66	2.57-2.52 pm	3.72
Portugal	129.75-130.75	130.35-130.60	80-220c dis	−12.87	300-650dis	−14.66
Spain	157.00-157.32	157.22-157.32	150-170c dis	−12.21	415-465dis	−11.19
Italy	1654.5-1657.25	1655.5-1656.5	8.50-9.0 lire dis	−6.33	28-28.75dis	−6.84
Norway	7.6480-7.7050	7.7000-7.7050	2.10-2.40ore dis	−3.50	5.50-5.80dis	−2.93
France	8.2970-8.3130	8.3000-8.3050	1.57-1.72c dis	−2.37	5.55-5.95dis	−2.76
Sweden	8.0010-8.0120	8.0070-8.0120	1.05-1.25ore dis	−1.72	3.15-3.35dis	−1.62
Japan	233.40-234.15	233.85-234.00	0.62-0.58y pm	3.07	2.01-1.96 pm	3.39
Austria	19.250-19.2825	19.25-19.27	6.40-5.40gro pm	3.67	19.40-16.40pm	3.71
Switz.	2.1825-2.1975	2.1910-2.1920	1.10-1.05c pm	5.88	3.15-3.10 pm	5.70

† UK and Ireland are quoted in U.S. currency. Forward premiums and discounts apply to the U.S. dollar and not to the individual currency. Belgian rate is for convertible francs. Financial franc 56.17-56.22.

OTHER CURRENCIES

Dec. 9	£	$		£ Note Rates
Argentina Peso...	28.92-29.00	20.16-20.19	Austria	27.65-27.95
Australia Dollar...	1.5600-1.5955	1.0998-1.1055	Belgium	80.60-81.40
Brazil Cruzeiro	1,325.9-1,334.0	924-929	Denmark	14.26-14.40
Finland Markka	8.3945-8.4080	5.8510-5.8530	France	11.94-12.06
Greek Drachma	141.30-141.90	98.50-99.00	Germany	3.93-3.97
Hong Kong Dollar	11.22-11.23	7.8170-7.8190	Italy	2370-2400
Iran Rial	127.16*	87.5*	Japan	338-343
Kuwait Dinar (KD)	0.4200-0.4205	0.29254-0.29264	Netherlands	4.40¾-4.44¼
Luxembourg Fr.	80.07-80.17	55.80-55.82	Norway	11.09-11.19
Malaysia Dollar	3.3600-3.3660	2.3420-2.3440	Portugal	185-195
New Zealand Dlr.	2.1580-2.2090	1.5185-1.5360	Spain	224¾-235
Saudi Arab. Riyal	4.9965-5.0015	3.4810-3.4815	Sweden	11.50-11.60
Singapore Dollar	3.0600-3.0660	2.1315-2.1335	Switzerland	3.16¼-3.19¼
Sth. African Rand	1.7485-1.7525	1.2180-1.2210	United States	1.42½-1.44½
U.A.E. Dirham	5.2710-5.2765	3.6720-3.6730	Yugoslavia	201-212

* Selling rates.

CURRENCY MOVEMENTS

Dec. 9	Bank of England Index	Morgan Guaranty Changes%
Sterling	82.6	−8.2
U.S. dollar	130.2	+81.3
Canadian dollar	92.0	+0.2
Austrian schilling	114.6	+2.9
Belgian franc	89.7	−11.6
Danish kroner	78.3	−6.2
Deutsche mark	124.4	+6.8
Swiss franc	150.0	+13.2
Guilder	114.6	+4.2
French franc	66.4	−15.1
Lira	49.1	−12.0
Yen	154.3	+11.0

Morgan Guaranty changes: average 1980-1982=100. Bank of England Index (base average 1975=100).

CURRENCY RATES

Dec. 9	Bank rate %	Special Drawing Rights	European Currency Unit
Sterling	—	0.725922	0.573274
U.S. $	8½	1.04177	0.822361
Canadian $	9.93	*	1.02639
Austria Sch	3¾	20.2103	15.9291
Belgian F	10	58.0735	45.8836
Danish Kr.	7	10.3943	8.19894
D mark	4	2.86455	2.26149
Guilder	5	3.21021	2.53452
French F.	9½	8.70295	6.87288
Lira	17	1735.33	1369.44
Yen	5	244.087	194.077
Norwgn Kr.	8	8.07111	6.38152
Spanish Pta	—	164.894	130.221
Swedish Kr	8½	8.37791	6.61631
Swiss Fr	4	2.30523	1.81824
Greek Dr'ch	20½	102.875	81.0190

*C$/SDR rate for Dec 8: 1.30102.

EXCHANGE CROSS RATES

Dec. 9	Pound St'rling	U.S. Dollar	Deutschem'k	Japanese Yen	French Franc	Swiss Franc	Dutch Guild	Italian Lira	Canada Dollar	Belgian Franc
Pound Sterling	1.	1.436	3.948	339.5	11.993	3.168	4.420	2388.	1.793	80.12
U.S. Dollar	0.697	1.	2.749	236.5	8.355	2.207	3.079	1664.	1.249	55.81
Deutschemark	0.253	0.364	1.	86.00	3.038	0.802	1.120	604.9	0.454	20.30
Japanese Yen 1,000	2.946	4.228	11.63	1000.	35.32	9.330	13.02	7034.	5.281	236.0
French Franc 10	0.834	1.197	3.292	283.1	10.	2.641	3.686	1991.	1.495	66.81
Swiss Franc	0.316	0.453	1.246	107.2	3.786	1.	1.395	753.9	0.566	25.29
Dutch Guilder	0.226	0.325	0.893	76.81	2.713	0.717	1.	540.3	0.406	18.13
Italian Lira 1,000	0.419	0.601	1.653	142.2	5.022	1.326	1.851	1000	0.751	33.55
Canadian Dollar	0.558	0.801	2.202	189.3	6.689	1.767	2.465	1332.	1.	44.68
Belgian Franc 100	1.248	1.792	4.927	423.7	14.97	3.955	5.517	2981.	2.238	100.

EURO-CURRENCY INTEREST RATES (Market closing rates)

Dec. 9	Sterling	U.S. Dollar	Canadian Dollar	Dutch Guilder	Swiss Franc	D-mark	French Franc	Italian Lira	Belgian Franc Conv.	Belgian Franc Fin.	Yen	Danish Kroner
Short term	9⅛-9¼	9¼-9½	9½-10	6-6⅛	1⅞-2	5½-5⅝	11¾-12	15¼-16¼	9-9½	9-9½	6 5/16-6 7/16	12 1/16-12 5/16
7 day's notice	9-9¼	9 5/16-9 9/16	10¼-10¾	6-6⅛	2-2¼	5 7/16-5 9/16	11¾-12	15¼-16¼	10¼-10¾	10-10½	6 5/16-6 7/16	11⅝-12⅛
Month	9 [illegible]	9 [illegible]-10 [illegible]	9 [illegible]	6 [illegible]	4 [illegible]	6 [illegible]	12-12⅛	16-16⅛	10½-11	10⅛-10⅜	6 [illegible]-7 [illegible]	12⅜-12⅞
Three months	9⅜-9½	10-10¼	9 [illegible]	6 [illegible]	4 [illegible]-4⅜	6¼-6⅜	12⅝-12⅞	16¾-17¼	11¼-11¾	11⅛-11⅜	6⅝-6¾	11¾-12¼
Six months	9⅜-9¾	10⅜-10⅝	9 [illegible]-10 [illegible]	6½-6⅝	4 [illegible]	6 [illegible]	13⅝-13⅞	17¾-18¼	11⅜-11⅞	11¼-11½	6⅝-6¾	11¾-12¼
One Year	9⅞-10	10⅝-10⅞	10 [illegible]-10 [illegible]	6 [illegible]	4½-4⅝	6½-6⅝	14-14¼	18⅛-18⅞	11½-12	11⅝-11⅞	6¾-6⅞	11⅞-12⅜

Asian $ (closing rates in Singapore): Short-term 9½-9⅝ per cent; seven days 9 9/16-9 11/16 per cent; one month 10-10⅛ per cent; three months 10¼-10⅜ per cent; six months 10 5/16-10 7/16 per cent; one year 10⅝-10¾ per cent. Long-term Eurodollars two years 11¼-11½ per cent; three years 11⅝-12 per cent; four years 12-12¼ per cent; five years 12¼-12½ per cent nominal closing rates. Short-term rates are call for U.S. dollars and Japanese yen; others two days' notice.

MONEY MARKETS

Rates react to weak pound

London short-term interest rates reacted nervously to the weakening of sterling against the dollar on Friday. The very short end of the market was held down by the Bank of England forecast of a small £100m money market credit shortage, later revised to £200m, but periods from three-month to one-year rose by ⅛ per cent.

One-year interbank money was offered at 10 1/16 per cent, the highest level since mid-September, and the first time that any fixed period has been quoted in double figures since the cut in clearing bank base rates in early October.

> **UK clearing banks' base lending rate 9 per cent (since October 4 and 5)**

Most of the week rates had been very steady, refusing to show movement on earlier weakness of the pound, but market nerves were further illustrated Friday afternoon when the lowest accepted bid at the weekly Treasury bill tender received 92 per cent of the £100m issue.

Firm U.S. interest rates were the major factor creating fears of higher rates in London, following remarks by the U.S. Treasury Secretary, and the injection of only $1bn of liquidity into the New York banking system by the Federal Reserve on Thursday, which failed to stop Federal funds touching 9⅝ per cent.

In Frankfurt call money eased back to 5.525 per cent from 5.60 per cent after banks bid strongly for funds at the beginning of the week to build up minimum reserve requirements early in the month, and to fulfil year-end balance sheet needs.

Paris call money retreated to 11¾ per cent on Friday, equal to the 2½-year low touched the previous week, despite the weakness of the French franc against the dollar. The Bank of France intervened in the Paris market on Tuesday, but kept its dealing rate unchanged at 12 per cent when buying about FFr 14bn of first category paper.

Amsterdam overnight money finished the week very firm at 6 per cent, compared with 5 13/16 per cent on the previous Friday, but liquidity was considered adequate to meet the needs of the banking system at present, and no special advance was expected to supplement the normal quota facility.

MONEY RATES

Dec. 9	Frankfurt	Paris	Zurich	Amst'dam	Tokyo	Milan	Brussels	Dublin
Overnight	5.50-5.55	11¾	1¾-2¼	5¾-6	6.53125	17½-17⅞	6.60	12¼-12½
One month	6.40-6.55	12 [illegible]-12 [illegible]	4⅝-4½	6⅛-6¼	6.50	—	10⅛-10¾	12¼-12½
Two months	6.35-6.50	12 [illegible]-12 [illegible]	—	—	—	17½-17⅞	—	12¼-12½
Three months	6.35-6.50	12 [illegible]-12 [illegible]	4 [illegible]-4 [illegible]	6½-6⅝	6.28125	17⅝-18	11-11¼	12¼-12½
Six months	6.30-6.45	12¼-12⅜	—	6½-6⅝	—	—	11⅛-11½	12⅜-12⅝
Lombard	5.5	—	—	—	—	—	—	—
Intervention	—	12	—	5¾	—	—	—	—

LONDON MONEY RATES

Discount Houses Deposit and Bill Rates

Dec. 9 1983	Sterling Certificate of deposit	Interbank	Local Authority deposits	Company Deposits	Market Deposits	Treasury (Buy)	Treasury (Sell)	Eligible Bank (Buy)	Eligible Bank (Sell)	Fine Trade (Buy)
Overnight	—	6-9½	9-9¼	7-9½	6-9	—	—	—	—	—
2 days notice	—	—	8⅞-9	—	—	—	—	—	—	—
7 days or	—	—	—	—	—	—	—	—	—	—
7 day notice	—	8⅞-9¼	8⅞-9⅛	9¼-9½	9	—	—	—	—	—
One month	9 [illegible]-9 [illegible]	9⅛-9¼	9⅛	9¼-9½	9	9 1/32	8 31/32-9	9 1/32	9	9 11/32
Two months	9 [illegible]-9 [illegible]	9¼-9⅜	9 [illegible]	9⅜	9	8 31/32	8 31/32-8 [illegible]	8 [illegible]	8 [illegible]	9 [illegible]
Three months	9 [illegible]-9 [illegible]	9⅜-9½	9⅜	9¾	9	8⅞	8 [illegible]	8 [illegible]	8⅞	9 [illegible]
Six months	9 [illegible]-9 [illegible]	9⅝-9¾	9⅝	—	—	—	—	9 [illegible]	9 [illegible]	9 [illegible]
Nine months	9 [illegible]-9 [illegible]	9 [illegible]-10	9⅝	—	—	—	—	—	—	—
One year	9 [illegible]-9 [illegible]	9 [illegible]-10	9 [illegible]	—	—	—	—	—	—	—

	Local Auth. negotiable bonds	Local Authority Deposits	Finance House Deposits	$ Certs of Deposits	SDR Linked Deposits	ECU Linked Deposits
One month	9⅝-9½	—	9¼	9.75-9.85	8 [illegible]-9 [illegible]	8⅞-9¼
Two months	9⅝-9⅜	—	9 [illegible]	9.75-9.85	9-9⅜	9-9⅜
Three months	9 [illegible]-9 [illegible]	—	9⅜	9.85-9.95	9 [illegible]-9 [illegible]	9⅛-9½
Six months	9½-9⅛	—	9⅝	10.00-10.02	9¼-9⅝	9 [illegible]-9 [illegible]
Nine months	10-9⅝	—	9 [illegible]	10.25-10.45	—	—
One year	10-9 [illegible]	—	9 [illegible]	10.55-10.70	9 [illegible]-9 [illegible]	9¾-10⅛
Two years	—	10⅜	—	—	—	—
Three years	—	10½	—	—	—	—
Four years	—	10¾	—	—	—	—
Five years	—	10⅞	—	—	—	—

ECGD Fixed Rate Export Finance Scheme IV Average Rate for interest period November 2 to December 6 1983 (inclusive) 9.350 per cent. Local authorities and finance houses seven days' notice, others seven days' fixed. Finance Houses Base Rates (published by the Finance Houses Association) 9½ per cent from December 1 1983. London and Scottish Clearing Bank Rates for lending 9 per cent. London Deposit Rates for sums at seven days' notice 5½ per cent. Treasury Bills: Average tender rate of discount 8.8843 per cent. Certificates of Tax Deposit (Series 6). Deposits of £100,000 and over held under one month 9½ per cent; one-six month 9¾ per cent; six-12 month 10 per cent. Under £100,000 9¾ per cent from October 6. Deposits held under Series 4-5 10 per cent. The rate for all deposits withdrawn for each 8 per cent.

NEW YORK (4 pm)

Prime rate	11
Broker loan rate	10-10⅞
Fed funds	9 5/16
Fed funds at intervention	9 7/16

Treasury Bills

One month	8.45
Two month	8.85
Three month	8.99
Six month	9.17
One year	9.25

Treasury Bonds

Two year	99 7/32
Three year	99⅜
Four year	99 5/32
Five year	99 5/32
Seven year	98 17/32
10 year	99 1/32
30 year	100⅛

FT LONDON INTERBANK FIXING

LONDON INTERBANK FIXING
(11.00 am December 9)

3 months U.S. dollars

bid 10 1/8	offer 10¼

6 months U.S. dollars

bid 10 5/8	offer 10½

The fixing rates are the arithmetic means, rounded to the nearest one-sixteenth, of the bid and offered rates for $10m quoted by the market to five reference banks at 11 a.m. each working day. The banks are National Westminster Bank, Bank of Tokyo, Deutsche Bank, Banque Nationale de Paris and Morgan Guaranty Trust.

FINANCIAL FUTURES

LONDON

THREE-MONTH EURODOLLAR $1m points of 100%

	Close	High	Low	Prev
Dec	90.11	90.13	90.05	90.21
March	89.57	89.58	89.48	89.63
June	89.27	89.27	89.19	89.32
Sept	89.02	89.04	88.99	89.06
Dec	88.80	88.80	88.74	88.77

Volume 3,943 (2,626)
Previous day's open int 8,482 (8,176)

THREE-MONTH STERLING DEPOSIT £250,000 points of 100%

	Close	High	Low	Prev
Dec	90.86	90.88	90.81	90.88
March	90.36	90.40	90.33	90.45
June	90.11	90.16	90.09	90.25
Sept	89.93	89.99	89.92	90.02
Dec	89.70	—	—	89.79

Volume 1,361 (510)
Previous day's open int 4,699 (4,637)

20-YEAR 12% NOTIONAL GILT £50,000 32nds of 100%

	Close	High	Low	Prev
Dec	108-25	109-07	108-20	109-17
March	107-26	108-17	107-19	108-18
June	107-13	—	—	108-07
Sept	107-00	—	—	107-26
Dec	106-19	—	—	107-13

Volume 3,043 (2,596)
Previous day's open int 3,389 (3,533)
Basis quote (clean cash price of 13¾% Treasury 2003 less equivalent price of near futures contract) par to 10 (32nds)

STERLING £25,000 $ per £

	Close	High	Low	Prev
Dec	1.4340	1.4377	1.4336	1.4395
March	1.4395	1.4405	1.4345	1.4425
June	1.4425	1.4425	1.4410	1.4455

Volume 570 (229)
Previous day's open int 2,357 (2,436)

DEUTSCHE MARKS DM 125,000 $ per DM

	Close	High	Low	Prev
Dec	0.3638	0.3638	0.3629	0.3656
March	0.3675	0.3678	0.3665	0.3696
June	0.3713	—	—	0.3730

Volume 186 (75)
Previous day's open int 343 (346)

SWISS FRANCS SwFr 125,000 $ per SwFr

	Close	High	Low	Prev
Dec	0.4522	0.4525	0.4515	0.4560
March	0.4585	0.4595	0.4580	0.4627
June	0.4666	—	—	0.4698

Volume 24 (22)
Previous day's open int 106 (115)

JAPANESE YEN Y12.5m $ per Y100

	Close	High	Low	Prev
Dec	0.4231	0.4255	0.4231	0.4272
March	0.4268	0.4295	0.4262	0.4312
June	0.4307	0.4330	0.4307	0.4348

Volume 194 (39)
Previous day's open int 267 (271)

CHICAGO

U.S. TREASURY BONDS (CBT) 8% $100,000 32nds of 100%

	Close	High	Low	Prev
Dec	70-02	70-08	69-31	70-03
March	69-12	69-19	69-09	69-14
June	68-26	69-00	68-23	68-29
Sept	68-10	68-17	68-09	68-14
Dec	67-28	68-04	67-26	68-00
March	67-16	67-20	67-15	67-20
June	67-06	67-10	67-05	67-10
Sept	66-29	67-00	66-24	67-01
Dec	—	—	—	—
March	—	—	—	—
June	—	—	—	—

U.S. TREASURY BILLS (IMM) $1m points of 100%

	Close	High	Low	Prev
Dec	91.03	91.06	91.00	91.02
March	90.47	90.50	90.46	90.47
June	90.14	90.19	90.13	90.15
Sept	89.92	89.97	89.91	89.93
Dec	89.73	89.77	89.74	89.73
March	89.55	89.57	89.55	89.55
June	89.37	89.38	89.36	89.37
Sept	89.19	89.18	89.16	89.18

CERT. DEPOSIT (IMM) $1m points of 100%

	Close	High	Low	Prev
Dec	90.34	90.37	90.33	90.38
March	89.66	89.72	89.65	89.69
June	89.30	89.36	89.30	89.33
Sept	89.03	89.10	89.03	89.06
Dec	—	—	—	—
March	—	—	—	—
Sept	79.20	—	—	78.70

THREE-MONTH EURODOLLAR (IMM) $1m points of 100%

	Close	High	Low	Prev
Dec	89.83	89.85	89.81	89.88
March	89.25	89.31	89.24	89.27
June	88.92	88.98	88.92	88.96
Sept	88.67	88.74	88.68	88.70
Dec	88.45	88.52	88.45	88.47
March	88.22	88.27	88.22	88.25

STERLING (IMM) $s per £

	Close	High	Low	Prev
Dec	1.4360	1.4375	1.4345	1.4405
March	1.4385	1.4405	1.4370	1.4425
June	1.4425	1.4435	1.4410	1.4460
Sept	1.4470	1.4500	1.4460	1.4500
Dec	1.4495	1.4500	1.4475	1.4515
March	1.4520	—	1.4500	1.4540

GNMA (CBT) 8% $100,000 32nds of 100%

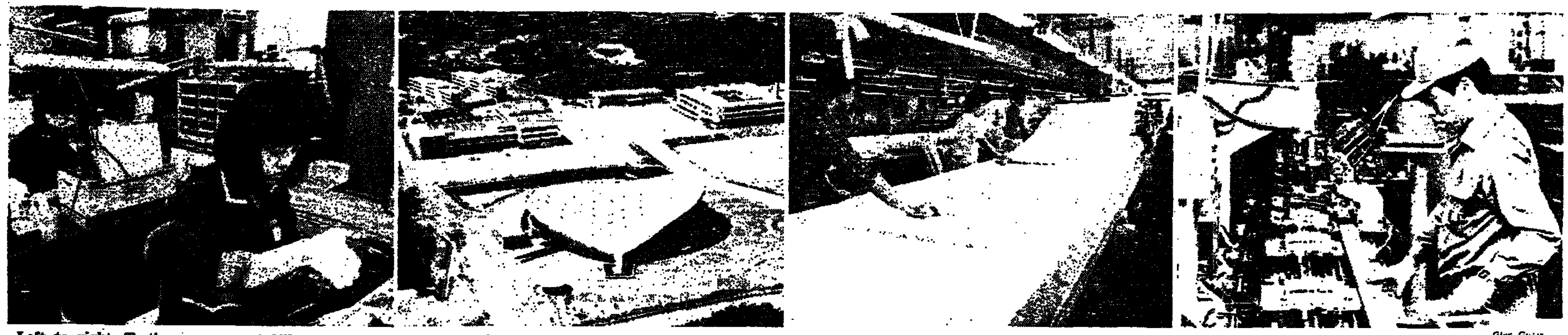
	Close	High	Low	Prev
Dec	69-20	69-31	69-20	69-27
March	68-15	68-26	68-14	68-21
June	67-15	67-26	67-13	67-22
Sept	66-20	66-27	66-20	66-27
Dec	65-29	66-07	65-29	66-04
March	—	—	—	—
June	64-26	65-05	64-26	65-03
Sept	64-13	64-23	64-13	64-23
Dec	—	—	—	—
March	—	—	—	—
June	—	—	—	—
Sept	—	—	—	—

WEEKLY CHANGE IN WORLD INTEREST RATES

	Dec. 9	change		Dec. 9	change
LONDON			**NEW YORK**		
Base rates	9	Unch'd	Prime rates	11	Unch'd
7 day interbank	9 1/16	+1/32	Federal funds	9 1/16	−1/16
3 mth interbank	8 15/16	+1/16	3 Mth. Treasury Bills	8.99	+0.10
Treasury Bill Tender	8.8843	+0.0177	6 Mth. Treasury Bills	9.15	+0.09
Band 1 Bills	9 1/16	Unch'd	3 Mth. CD	9.70	+0.25
Band 2 Bills	9	Unch'd	**FRANKFURT**		
Band 3 Bills	8⅞	Unch'd	Lombard	5.50	Unch'd
3 Mth. Treasury Bills	8⅞	−1/32	One Mth. Interbank	6.475	+0.05
1 Mth. Bank Bills	9 1/32	+1/32	Three month	6.425	Unch'd
3 Mth. Bank Bills	8 31/32	Unch'd	**PARIS**		
TOKYO			Intervention Rate	12	Unch'd
One month Bills	6.46875	Unch'd	One Mth. Interbank	12.125	−0.125
Three month Bills	6.28125	Unch'd	Three month	12.125	−0.0625
BRUSSELS			**MILAN**		
One month	10⅝	−1/32	One month	17 11/16	Unch'd
Three month	11⅛	+1/16	Three month	17 11/16	Unch'd
AMSTERDAM			**DUBLIN**		
One month	6 1/16	+⅛	One month	12⅜	+⅛
Three month	6 3/16	+1/16	Three month	12⅜	+⅛

London—band 1 bills mature in up to 14 days, band 2 bills 15 to 33 days, and band 3 bills 34 to 63 days. Rates quoted represent Bank of England buying or selling rates with the money market. In other centres rates are generally deposit rates in the domestic money market and their respective changes during the week. Band 4 bills 8⅞.

FINANCIAL TIMES SURVEY



Left to right: Testing cameras at Nikon's Tokyo plant; Matsushita's (National Panasonic) training centre at Osaka; making clothes at Jan Sin Mee Garments; machining parts for video recorders at Sanyo, Osaka

Glyn Genin

Japanese Industry

A modest recovery from recession brings with it worries about prospects for sustained growth. The paradox is that while exports are booming, recovery of demand inside Japan is taking time to materialise

By Charles Smith

JAPAN'S INDUSTRY has begun a modest recovery this year from the recession into which it was plunged at the end of 1981 when Western nations abruptly cut back on their purchases of Japanese products. However, recovery has brought with it a number of worries as to where the economy may be going next and about prospects for sustained growth in the next year to 18 months.

A paradox that is causing conc'n both to Japan's economic planners and to foreign observers is that while industry is riding the crest of a new export boom, recovery of demand inside Japan is taking time to materialise.

No less disturbing is the fact that the healthy growth of industrial production which set in just before the middle of 1983 has so far been unaccompanied by any sign that Japanese companies plan to increase investment in new plant and equipment.

The various imbalances that have accompanied Japan's emergence from its 1981 recession (and which recently led the Economic Planning Agency to remark that the economy is in a state of "imperfect combustion") can be explained at least partly by factors outside Japan's control. These include the high level of U.S. interest rates which have made it hard for Japan to bring down its own rates to a level where industry might feel encouraged to embark on a fresh round of investment.

However, there is also a structural paradox at the heart of Japan's current economic predicament which could explain much of what has happened—or not happened—during the the past few months. This is that while one section of Japanese industry seems to be dying on its feet something very like the second industrial revolution is occurring elsewhere in the economy.

Japan's older basic materials industries have become almost completely unviable in the face of high energy costs ushered in by the second oil crisis and are now being scaled down to one half or less of their former size, or in some cases being phased out completely. The demise of industries such as aluminium or petro-chemicals has coincided with the explosive growth of a new generation of industries that are knowledge- rather than materials-intensive, and which depend to a minimum extent on imported inputs.

The new generation of industries centres around integrated circuits of which Japan is now the second largest manufacturer after the U.S. But the use which has been made of the electronic chip as a seed of industrial renovation in Japan, contrasts sharply with the way chips were originally put to work in their country of origin.

Japanese companies were the first to produce integrated circuit-powered desk top and pocket calculators and the sector realises that the number of parts in colour TV sets could be drastically reduced by integrated circuitry.

Since the advent of chip-driven calculators a range of Japanese industries which could never have come into existence, or at least never flourished without integrated circuits, has expanded enormously. The lis now includes the numerically controlled machine tools which account for half the output of Japan's machine-tool industry, video tape recorders, and the Japanese word processors.

Integrated circuits represent the core of the second industrial revolution that Japan has been experiencing since shortly before the second world oil shock, but electronics alone would certainly not have brought Japanese industries to where they are today. A development for the production of miniature bearings in the 1970s went hand in hand with the chip revolution to produce "mechatronics" products that combine advanced electronics with equally advanced engineering.

Outside the field of electronics Japanese companies involved in old industries such as steel or textiles, have diversified into new areas while making use of traditional skills and knowhow.

The Japanese steel industry, faced with a roadblock to its further growth as a producer of ordinary steel (in the face of shrinking world markets and competition from new industrial countries), has branched into new directions which include chemicals and engineering.

The once mighty Japanese synthetic textiles industry now also beating a slow retreat in the face of high energy costs, has turned itself into a pioneer in the development of new materials ranging from acrylic-based carbon fibres to artificial suede.

The final instance of structural change in the Japanese economy is the appearance of a new generation of service industries, catering either to companies in traditional economic sectors that are in search of a way to cut overheads or to consumers who have more time on their hands today than in earlier and more hectic phases of Japan's economic development.

Japan's numerous small service companies have frequently been dismissed as insignificant in comparison with heavyweight sectors such as steel or cars. In 1980, however, combined investment by the service sector amounted to marginally more than the total value of investment in new generating equipment by the electric power industry and to more than double the investment of either the motor or the steel industries.

The growth of the service sector together with the appearance of new electronics industries has served to keep the Japanese economy moving during the past few years while traditional pillars of the economic system have been crumbling.

But the new "soft" industries, as they have been called by government economists, have brought problems as well. According to the Finance Ministry which coined the term "softnomics" in a book on the Japanese economy issued early this year, the new trend means, first and foremost, that the government has become seriously short of information about what is happening in the economy.

Service sector companies as well as many of the small high-technology companies, as the major users of robots and numerically - controlled machines, tend to be small enough to avoid the attention of the Japanese tax authorities and they are unlikely to be invited to become members of the various industry associations through which Japanese economic ministries keep in touch with different sectors of the economy.

A further problem posed by the growth of the new soft sectors is that of statistical definition. Japan's Industrial Taxation Index which generally has been regarded as a key economic indicator is based overwhelmingly on the product of the traditional "hard" industries. A new industrial production index which makes due allowance for soft sectors of the economy is seen as an

CONTINUED ON NEXT PAGE

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Editorial production: Michael Strutt; layout: Phil Hunt

Glyn Genin

Imported Mazda cars on a storage lot at Aurora, Illinois. Japan's export successes are still unsettling its trade balance.

Japan's paradox

CONTINUED FROM PAGE I

urgent necessity by the Ministry of Finance and is in fact in the process of preparation.

The second point the Finance Ministry bureaucrats seem to want to stress about the way Japan's economy is likely to work, in the era of "softnomics" is that private investment and public works spending by the government will play a less prominent role in determining economic growth rate than has been the case in the past.

Service industries—despite their predominance in the overall investment league table—require a relatively small amount of capital to produce a given amount of output. Even the new high-technology industries that are based on integrated circuits tend to cost less to equip than steel mills and shipyards.

A corollary of this trend is that investment in high-technology sectors is likely to have to be renewed more frequently than in the old materials-intensive industries, but this merely means, says the Ministry, that investment cycles will be more stable than in the past.

The broad conclusion that the Ministry seems to be drawing from its studies of the "softnomisation" of Japan's economy is that there may be less the government can do in future to influence economic trends as well as less chance of things getting badly out of control.

However, Ministry economists would seem to have either overlooked or deliberately played down one crucial consequence of softnomisation—or rather of the enormously increased added value that Japan is likely to apply over the next few years to its raw material imports. This is that the country's need for such imports will tend to grow much more slowly than the growth of the economy and much more slowly than Japan's capacity to export.

Flagging demand for imports of primary produce has been a factor in 1983 in the emergence of a surplus which threatens to pass well beyond Y30bn ($128m) and which may invite severe criticism from Japan's trade partners, but the trend could become worse over the next few years according to many forecasts, with the surplus reaching as much as Y60bn by 1985.

The officials in the Finance Ministry who have been amusing themselves during the past year by elaborating theories of softnomics, may soon have to tackle a much more urgent task—that of finding ways to increase Japan's imports of manufactured goods and food products.

Surplus continues to be embarrassment

Trade

ROBERT COTTRELL

JAPAN IS grappling this year with a problem which many less favoured countries would be happy to share—a vaulting trade surplus, likely to exceed U.S.$ 30bn. The imbalance produces friction abroad, and embarrassment at home.

When, in November, Japan posted its U.S.$ 2.02bn trade surplus for October, Prime Minister Mr Yasuhiro Nakasone issued a statement saying: "It is indispensable for Japan to contribute to the development of the world economy by increasing the imports of manufactured goods from other countries."

Mr Nakasone's comments reflect Japan's recognition that, as the second-largest economy in the non-Communist world, it has a key role to play in maintaining the healthy world trade on which its own prosperity depends. But Japan's concern is not only about the global trading climate. Its successes in specific export sectors have brought about equally specific protectionist retaliation from imports.

Earlier this year, France decided that all its imports of video cassette recorders had to be processed through a small provincial customs post. The U.S. is cossetting what remains of its domestic motorcycle manufacturing capacity by imposing high taxes on imports.

For most industrial countries, Japan's trade surplus is even more unfavourable than the bald figure suggests. Virtually all of Japan's exports are manufactured goods. But most of its imports are raw materials, including oil.

Japan just does not seem to want what most foreign manufacturers have to offer. It is not a matter of tariffs: Japan's tariffs on manufactured goods are, on average, lower than those of most industrialised countries.

The extent and strength of "non-tariff barriers"—requirements and procedures which are difficult for foreign manufacturers to fulfill—are a matter of dispute, but are declining. The Japanese Government produces attractive booklets explaining why the Japanese market is wide open to exports. Toyota Motor Corp. produces a handbook specifically to assist foreign suppliers to sell to it.

Japan is now liberalising its way out of the years in which it deliberately protected its markets in order to develop a domestic manufacturing capacity sufficiently large and efficient to meet local needs and compete internationally. The original policy appears to have succeeded too well.

Japanese consumers like Japanese products so much that, even with the barriers coming down, foreign products have a hard time getting a market foothold.

In the "sunrise" high technology industries, Japan may lag behind the U.S. in research and development, but scores in the market-place by virtue of its mass-production efficiency.

In traditional heavy-industry sectors such as steel and shipbuilding, Japan's high productivity makes it best-placed among industrialised nations to compete with the cost-cutting of developing countries.

Awkward

Japan's strong trading position has become particularly awkward during the last two years, as the world has climbed unsteadily out of recession. While Japan's domestic demand has remained relatively weak, its exports have gone streaking ahead, and its import bills have been held down by a weaker oil price.

Some U.S. lobbies have been to the fore in accusing the Japanese Government of maintaining a "cheap yen" policy to stimulate imports.

Some steady strengthening of the yen is expected over the next year, but most analysts believe the exceptional currency to be the U.S. dollar, kept artificially strong by U.S. Government borrowing to fuel its budget deficit.

A dearer yen could help Japan's trade balance back into line. The Government's economic planning agency estimates that each 10-yen depreciation against the U.S. dollar cuts imports by U.S.$60m in the first year and U.S.$2.3bn in the second.

Moving towards a redressal of Japan's trade balance, even with the explicit encouragement of the Japanese Government, is likely to be a painstakingly slow business. Companies may be willing to accept the desirability of importing more consumer goods, but are hardly likely to translate that acceptability into practice unless consumers, too, develop a greater enthusiasm for foreign goods. And companies may be willing to import more capital goods. But capital goods are falling as a proportion of Japan's imports as the economy outgrows its older, heavier industries.

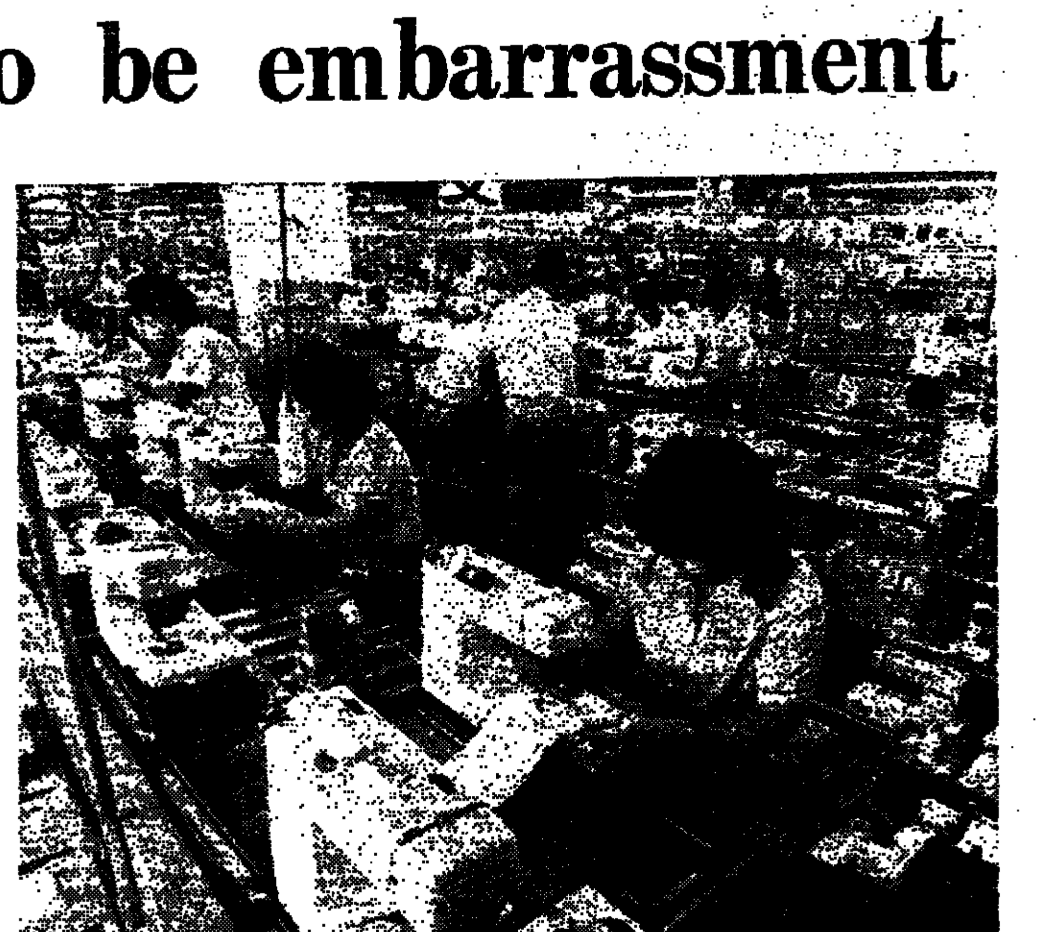
Agricultural imports are a sector which Japan does protect with stiff tariff barriers. Here the problem is more political than economic. The farm vote is important to Japanese politicians. And farmers argue that, in any case, more imports of food would make a relatively small impact on the overall trade picture.

For the current year, the Japanese Government has responded to its booming trade surplus with a package of measures designed, not to curb exports, but to promote imports and stimulate domestic demand. According to Mr Nakasone, announcing the package on October 21, the measures "represent a maximum that can be taken under the severe fiscal constraints we face at present."

Mr Sosuke Uno, Minister of International Trade and Industry, said that the "most important priorities that Japan should place on economic policies are economic stimulation through the expansion of domestic demand and further opening of the Japanese market, coupled with import promotion, aimed at expanded, balanced growth of international trade."

The heart of the package comprises the following measures for stimulating the domestic economy:

- Public capital spending to be boosted with a Y1,880bn programme targeted mainly at disaster relief.
- Direct taxes to be cut by Y1,000bn in the next fiscal year.
- Improved provisions for urban redevelopment and housing production.
- Private sector investment in energy-related plant and equipment to be encouraged, assisted by a higher lending ceiling from the Development Bank of Japan.
- Power supply industry to be encouraged to spend an extra Y620bn buying and renovating plant.



Japan's efficiency in mass-production makes it difficult for foreign products to gain a foothold. Here sewing machines are being finished at the Brothers factory

- Cheaper loans to small firms from government credit institutions.

To assist imports, the Government also made these proposals:

- Some tariffs to be reduced, including those on scents, electronic cash registers, jute.
- Standards and certification procedures to be made clearer.
- Export-Import Bank of Japan to offer cheap loans to finance imports.
- The Government to strengthen efforts to eliminate discrimination in its procurement policies, and to urge the same attitude on local government bodies.
- Distribution systems for imported goods — particularly tobacco—to be improved: import promotional missions to be despatched to foreign countries.

As part of the October 21 package, Japan also promised a liberalisation of aspects of its financial system. The Government said it would:

- Consider issuing bonds in foreign markets and guaranteeing bonds in the U.S. market.
- Review restrictions on "forward" foreign exchange dealing in Tokyo and examine prospects for establishing a market in yen-denominated bankers' acceptances to facilitate trade.
- Review procedures for foreign enterprises investing in Japanese shares and real estate: and promote foreign entry to banking, securities and insurance sectors.
- Promote industrial co-operation with other countries, and financial co-operation with supra - national bodies such as the International Monetary Fund.

Some of these points were developed further in a November meeting between Mr Nakasone and during the visit of U.S. President Ronald Reagan, whose major theme was the yen/dollar exchange rate. Mr Reagan, for his part said America would try to keep public spending down—an intent which, if put into practice, should help moderate the dollar's strength.

Issues such as the yen/dollar exchange rate are quantifiable and analysable. More difficult is the vast gulf of non-communication between Japanese officials, who believe that their markets are effectively open: and overseas manufacturers, who believe that Japan's markets are effectively shut by procedural or attitudinal barriers.

There is probably some truth in the contention that foreign businessmen, having in the past taken a justifiably fatalistic view of penetrating Japan, are failing now to appreciate how much more liberal Japanese official attitudes have become.

Levels held down by sluggish demand and high interest rates

Investment

JUREK MARTIN

IT IS SOMETIMES said of the Japanese that they are poor at anticipating problems but unsurpassed at overcoming them once they become manifest. Evidence supporting the cliché includes Japan's successful adaptation to the first oil crisis, for which the country was totally unprepared, and the orderly nationalisation of suddenly unprofitable industries such as aluminium and, more recently, petrochemicals.

Viewed from a macroeconomic level, it is evident that the current principal, even if relative, weakness in the national economy lies in sluggish domestic demand. Hand in glove with this, capital investment, the driving force of the economy during its great expansion from 1955-73, and still a positive factor in the more reduced years since then, has become more of a neutral element recently.

Deterrent

There have been specific recent factors holding down the gross levels of capital investment—high real interest rates, a genuine deterrent to small and medium-sized companies, the running down of excess inventories, a process now largely completed, and lower corporate profits.

With the government's fiscal hands tied by soaring budgetary deficits and domestic monetary policy constrained by the need to protect the yen against high American interest rates, the private sector has received little, if any, official help to get its investment ball rolling again.

What is interesting on this occasion, however, is that the sluggishness of investment does not appear to be a cause of much more than ritualistic concern in Japan. The main reason for this can be ascribed to a general appreciation in both government and industry that investment patterns have changed and will continue to change further as the economy itself evolves from an industrial powerhouse to a more diversified machine geared to the production of technological goods and services.

Put more simply, a steel mill, which, even in Japan, might be expected to have a useful life span of a generation or more has different investment requirements and discipline than a much smaller less energy-intensive facility turning out integrated circuits. Such a plant, the Industrial Bank of Japan observed in a report earlier this year, already has a lifespan, down to four years or less, and, in some instances, is probably no longer than two years.

In the first quarter of the present fiscal year, which began in April, total investment in the services sector was running at an annual rate very close to that of the four main industrial sectors (steel, chemicals, cars, and electric power) combined—and in the case of steel, chemicals and electric power major investment cycles were still running their course.

At the same time the overall flatness in gross investment masks considerable sectoral variation, as the Organisation for Economic Co-operation and Development pointed out in its latest survey on Japan. Productive capacity in the older manufacturing industries rose by just 2.2 per cent in 1982, having risen by exactly twice as much in the year before; in the machinery sector, with its high component of technological innovation, the respective advances were 5.1 per cent in 1982 and 9.2 per cent in 1981.

Another measurement, employment levels, also demonstrates the expansion of both the electrical machinery and services sectors. Although total employment in the Japanese economy rose by 1 per cent, these two sectors recorded advances of 4.1 and 3.4 per cent respectively in 1982; no other individual sector registered an increase of as much as 2 per cent, while overall employment in the secondary sector (mining manufacturing and construction) actually fell last year for the first time since 1975.

It is obviously much more difficult for the Japanese government, for all its acknowledged expertise, to direct closely the investment in and development of, a more diversified service-oriented economy than one dominated by a handful of major industries. However, in contrast with the presumption of the first sentence of this article, it is evident that the government intends at the very least to keep abreast of the changing economic patterns.

Thus, earlier this year, the Economic Planning Agency produced its comprehensive "Japan in the Year 2000" study, which viewed with equanimity the continuing growth of the services and high - technology machinery sectors, whose annual growth rates between now and the end of the century are put at over six and four per cent respectively.

In a separate report, its annual review for fiscal 1983, the EPA states flatly that it believes that a service-intensive economy does not lead to lower productivity or stagflation, but rather acts as a stabilising force in the economy. It even notes, bluntly, that since services do not require inventories, investment is more likely to be tailored to real demand and not tied up in unsold stocks.

Outlook for the Industrial Structure

Industry	Real gross domestic product at 1975 price (in trillion yen, %) 1970	1980	2000	Average annual increase rate (%) 1970-1980	1980-2000
Primary industry	7.1 (6.1)	7.1 (3.7)	9.2 (2.1)	0.0	1.3
Secondary industry	46.3 (39.7)	82.1 (42.3)	198.2 (46.1)	5.9	4.5
Mining and manufacturing	35.7 (30.5)	67.4 (34.7)	170.9 (39.7)	6.6	4.8
Chemicals	7.5 (6.4)	10.7 (5.5)	15.0 (3.5)	3.6	1.7
Primary metals	3.4 (3.0)	7.2 (3.7)	9.2 (2.1)	7.8	1.2
Machinery	13.2 (11.3)	33.7 (17.4)	124.1 (28.9)	9.8	6.1
Others	11.6 (9.9)	15.8 (8.1)	22.6 (5.2)	3.1	1.8
Construction	10.7 (9.1)	14.7 (7.6)	27.3 (6.4)	3.2	3.2
Tertiary industry	63.4 (54.3)	104.8 (54.0)	222.5 (51.8)	5.2	3.8
Electricity, gas, water	2.6 (2.2)	3.8 (2.0)	5.7 (1.3)	3.9	2.0
Finance, insurance, real estate	13.6 (11.6)	27.7 (14.3)	55.0 (13.5)	7.4	3.8
Transportation, communication	7.1 (6.1)	11.3 (5.8)	18.0 (4.2)	4.8	2.3
Services, etc.	40.1 (34.4)	62.0 (31.9)	140.9 (32.8)	4.5	4.2
Total	116.8 (100.0)	194.1 (100.0)	430.0 (100.0)	5.2	4.1
Statistical errors	1.0	−5.3	—		
Gross domestic product	117.8	188.8	430.0	4.8	4.2
Chain growth rate				5.0	4.0

Source: OECD.

In any case the EPA states it expects the expanding services sector to have a high technological, knowledge - intensive input and thus be more likely to enhance productivity than depress it.

Uncertainty

There is probably more room for debate, and uncertainty, in the evolution of the electronics and electrical machinery sectors, largely because of the intense competition that already exists and the extraordinary rapid pace of technological innovation. The Industrial Bank of Japan, for example, has calculated that, in the integrated circuits field, the scale of investment in research and development and plant and equipment now accounts for more than 30 per cent of total sales.

"In the years ahead," the IBJ soberly advises, "it will be imperative for corporations to reinforce their financial strategy, for the relative strength of these corporations' investment capability will determine their growth potential."

Many of the smaller Japanese companies in the vanguard in the high technology and "life science" fields are notoriously undercapitalised and thus vulnerable to either economic circumstances (high real interest rates, for example) or marketing mistakes or defeats which can eliminate investment capital very quickly. This explains, of course, the surge in foreign venture capital entering Japan. But the sense of risk is quite high and it does not take much strength of the imagination to foresee a debacle in some area of Japanese high technology comparable to that which has afflicted the U.S. personal computer market in the wake of the flexing of the marketing muscle of International Business Machines.

However, the post-war Japanese economic miracle has been characterised, above all, by the willingness to invest. Even in the reduced economic circumstances of the ten years since the first oil shock, Japanese private (non-residential) capital investment in plant and equipment has remained comfortably above 15 per cent of gross national product.

This is a record which no other industrialised country can match and which underlies Japanese competitive economic strength.

THE NIKKO PERSPECTIVE

ON HOW The Japanese Financial System is Changing

Michiya Matsukawa, former Vice-Minister of Finance for International Affairs and present Chairman of the Institute, The Nikko Research Center, Ltd., provides a perspective on changes taking place in Japan's financial system.

RECENTLY ***there has been criticism from both within Japan and abroad that the Japanese financial system has not adapted to suit the current social and economic environment. What is your personal viewpoint?***

Matsukawa: My own analysis of the situation starts from the pace of economic change in Japan. Overall economic development has been extremely rapid in the period since the end of the Pacific War, implying that most sectors of the economy have responded reasonably well to economic growth and the changing international environment. Unfortunately, the financial services industry has been one of the slowest.

There are several reasons why the financial structure has fossilized and become dated—reasons that have close parallels in other industrialized nations. The first has been an overwhelming concern by investors with safety of principal with little regard for reasonable returns. This encourages perpetuation of the status quo and the inefficiencies that go with it. A second reason has been the separation of the banking and securities businesses as modeled on the Glass-Steagall Act in the United States. This has perpetuated an artificial segmentation of the financial services industry. Those arguing to maintain the exising financial structure start from the basic tenet that the small must be protected, both the small savers and the small institutions that have traditionally served them.

But reality is making this policy increasingly untenable. Just looking briefly at the historical process, there have been several interesting trends. Before the war the postal savings system was there to serve those with small deposits and to ensure that they had liquidity. The rich, though small in number, speculated in the futures of silk and beans. Later on, these same investors moved into the stock market. Thus we saw the beginning of a healthy financial system that offered various combinations of risk and return.

The war turned back the evolutionary clock to a point where the predominant concern was security of principal and liquidity. But economic development accelerated, and the level of personal financial assets has grown to the point where, on a per capita basis, it is among the highest in the world. In the process, demand for liquidity declined, and the sensitivity of investors to yields rose. This trend has been very apparent since the late 1960s.

SO WHY ***hasn't the financial system responded to this trend? And are there any factors that are forcing it to respond?***

Matsukawa: It has responded, but at a very slow pace. At each step of the way the grandfather clauses—whether implicit in the conventions of the financial system or explicit in legislation—have forestalled changes and perpetuated such aspects of the financial system as the structure of the banking system and the mechanism for determining interest rates. And the spectre of past failures of financial institutions is all too fresh in the minds of many and all too conveniently used to argue against reform, since drastic changes could imply potentially disruptive forces.

But right now the pressures for change are strong. I have already mentioned the growing volume of household financial assets and their search for higher yields. At present these assets total ¥430 trillion. A related pressure has been the sizable volume of national government bonds outstanding—currently ¥100 trillion—and their weakness in the secondary market. A third important trend has been the internationalization of funds flows since the 1950s. This particular trend is forcing Japan to discard its unique system of accounting and other financial conventions.

ONE LINE ***of argument states that the monetary authorities are the brake that has slowed down changes in the financial system. With your experience in both the public and private sectors, what is your analysis of this argument?***

Matsukawa: It is easy to place the blame on government, but I don't think it is appropriate in this case. There are no legal barriers to the type of changes for which I and many others are calling. The barriers are the strictures of past convention, whether it is the determination of interest rates, the composition of the syndicate for underwriting government bonds, access to membership in the stock exchange, the ability to acquire other financial institutions or the opportunity to move into the trust business.

Just to comment further on a couple of these issues, take the call for interest rate liberalization. The only legal restriction is the upper rate that can be offered on deposits; yet monetary authorities find themselves in a position of having to mediate among various types of financial institutions with conflicting interests in order to keep an eye on the health of the whole financial system and, at the same time, to encourage change. Thus the possibility of absurd situations, such as when the yields on government bonds have been higher than those on corporate bonds.

Another area is the trust business, which has been legally separated from banking operations. With pension fund assets growing at roughly 20 percent a year, many financial institutions have been anxious to join the trust banks and life insurance companies in managing these assets. Recently when a foreign bank sought a license for these activities, there was strong protest from the Japanese commercial banks, since they felt they had been waiting in line for years for the same privilege.

ADMITTEDLY ***the process of achieving a concensus is long and involved in any country, but what course do you expect this process to take in Japan?***

Matsukawa: I think the course of change has been quite transparent. The easiest changes are made in those areas where there are no serious conflicts of interest. A good example is the development of a money market with the bond repurchase agreements, certificates of deposit and other instruments in what I think can be called a relatively short period of time, although I am sure many of my friends in the international banking community were hoping it would even be shorter. And I am sure we will see progress on such issues as the bidding system on treasury bills and bankers acceptances.

THERE ***has been serious discussion recently of setting up an offshore market in Tokyo. What is your opinion?***

Matsukawa: Basically I am reluctant, but for reasons that differ from those officials in the Bank of Japan who see an environment in which it would be harder to control the money supply or those in the Ministry of Finance who are worried about tax evasion. Very simply I believe that isolating the domestic market from an offshore banking center would further retard the pace of change in the Japanese financial system and even work to fossilize the current structure. It should definitely not be a top priority.

WHAT ***then are the top priorities in your own agenda for reform of the financial system?***

Matsukawa: The top priorities are the liberalization of interest rates—freeing them from the traditional hierarchy of fixed relationships—and the development of new financial products. For a securities firm such as Nikko this means competing in segments traditionally considered the domain of the banks. I would also like to see the trust business opened up to more participants. In the banking area I think the banks should be allowed more tax-exempt reserves to reflect the increasing risks that they are incurring in international lending.

FINALLY ***could you comment on the impact of foreign exchange markets on the management of the domestic financial system?***

Matsukawa: The issue of domestic interest rates as it relates to movements of the yen is an extremely complex one. Until two or three years ago, the movements of the yen closely followed changes in economic fundamentals. Then, with the increasing liberalization of capital flows into and out of Japan, interest rate differentials and the resulting arbitrage activities have had a growing impact on exchange rates. But most recently, currency futures markets such as the International Money Market have added a new dimension to the foreign exchange market. Thus, apart from the settlements for goods and services or the transactions of the arbitrageur that involve the flow of funds across national boundaries, purely speculative money games and the expectations of investors are determining short-term directions in foreign exchange markets. It is just like the speculation in such commodities as silk and beans that I mentioned earlier: no one really intends to take delivery.

Needless to say, such a market defies government intervention. In fact, attempts at intervention can have an adverse psychological impact on the market. That is one reason why I have been against the proposed issuance of bonds in the United States by the Japanese government. You can't make water flow uphill, and it is just as hard to stem the flow of capital out of a country with high savings.

Therefore I believe that a move in the direction of further liberalization is desirable because it makes foreign exchange trends more predictable and thus exchange rates less volatile.

Slow thaw in resistance to foreign takeovers

Acquisitions

ROBERT COTTRELL

TWO MAJOR deals in the last 15 months have quickened overseas hopes that the Japanese corporate community may now be more receptive to acquisitions by foreign investors.

The deals, involving the British gasmaker BOC International, and the U.S. drug manufacturer Merck and Company, break new ground for foreign acquisition in Japan. But at the same time, the painstaking preparation which went into both deals serves to show just how cautiously a foreign company must still proceed if such transactions are to go smoothly.

In autumn last year, BOC International invested £30m ($43.5m) in convertible bonds and a European depository receipt issue which, when fully converted, would give it a 42.5 per cent equity stake in Osaka Sanso, Japan's third-largest industrial gasmaker and the market leader in the Kansai region. BOC was the first British company to acquire a major stake in a company quoted in the first section of the Tokyo Stock Exchange. While the stake is not a majority, analysts regard it as giving BOC effective control of Osaka Sanso.

Majority stakes

Merck's investment saw the company spend over $350m on acquiring majority stakes in two Japanese drug companies, Banyu Pharmaceutical and Torii Pharmaceutical. Banyu is much the larger of the two, costing Merck some $332m for its 50.02 per cent stake, most of which was bought in August 1983. Torii was bought in two tranches: 30.03 per cent for $8m in February 1982, and a further 20.5 per cent for $8m in February 1982, and a further 20.5 per cent for $11m in August 1983.

The transactions saw Merck become the first foreign company to acquire majority control of a first-section quoted company, and the first to control two Japanese-quoted companies. It also put Merck up into the first rank of the Japanese pharmaceutical industry, with an estimated 4 to 5 per cent share of the country's $10bn annual market. Banyu and Torii product ranges—led by antibiotics—lagged the technology of industry leaders by several years. But, importantly for Merck, both companies had trained sales forces, and direct access to a wide range of Japanese wholesalers.

With foreign-owned companies accounting for only about 3 per cent of Japan's sales, the country ought to provide some attractive prospects for would-be entrants. There are rare examples of large overseas companies holding minority but influential stakes in major Japanese manufacturers—such as General Motors and Chrysler Corporation's stakes in Isuzu Motors and Mitsubishi Motors Corporation.

Glyn Genin

A branch of McDonalds in Tokyo. Joint ventures between foreign investors and Japanese partners are common but the Japanese are reluctant to sell companies to foreign groups because of their view that companies are people rather than balance sheets

Some foreign companies have set up successful wholly-owned subsidiaries in Japan. The largest, such as IBM and Nestle, are also among the oldest: both were operating in Japan before the Second World War.

More common are joint ventures between foreign investors and Japanese partners—such as those entered into by Xerox and McDonalds. However, several joint ventures have foundered for two main reasons: either the foreign partner was anxious to take full control of the operation once it had been established—or the Japanese partner found its own overseas expansion constrained by the terms of its agreement with its foreign joint-venture partner in Japan.

For foreign investors wanting to acquire significant or controlling stakes in Japanese quoted companies, a major breakthrough came in 1980 with the abolition of an official 25 per cent upper limit on foreign ownership of Japanese companies.

Such a legal move could not in itself also abolish Japanese reluctance to sell companies to foreigners: or indeed reluctance to treat corporations and shareholdings as assets which might be freely traded for capital gains. But it did open the door to opportunities of obvious mutual benefit: and the experiences of BOC and Merck give some pointers as to how such opportunities can be created.

Counterparts

The BOC and Merck deals have a number of points in common which differentiate them from the classic "takeover" patterns of London or New York. Both foreign companies had enjoyed successful joint ventures with their Japanese counterparts before taking equity stakes.

Both deals were satisfied mainly through the issuing of new bonds and shares, obviating the need for any hitherto-controlling shareholders to sell out. Neither deal was followed by a sweeping-out of discredited management or corporate strategies. Instead, the emphasis was on the extent to which the Japanese companies would be able to grow further with access to the technology and products of the foreign parent or associate.

Three years before moving into its equity association with Osaka Sanso, BOC International had decided that it wanted a bigger and more direct presence in Japan's industrial gas market. In particular, it saw strong growth potential for specialist industrial gases if foreign technology could be matched to Japanese knowledge of the likely markets in such fields as electronics and steelmaking.

Manufacturing joint ventures with both Osaka Sanso and with the market-leader Nippon Sanso led BOC to conclude that Osaka Sanso would be a more positive counterpart for a closer equity tie. In exchange for a major shareholding, BOC would offer its new arm access to almost all of its industrial gas technology, including specialist electronics-related gases likely to be of particular importance in Japan.

Merck, too, preceded its acquisition with several years' germination. Mr Bryan Wright, President of Merck's Japanese subsidiary, says the seeds of the Banyu deal were sown in 1976-77 when Merck took a long-term view of the Japanese market. It saw Japan, as a high-technology highly educated country, producing in future years innovative pharmaceutical products of its own. It saw stricter government new-product regulations shaking-out smaller companies and the orientation towards research leading larger Japanese manufacturers to internationalise.

Merck also felt that, from its own point of view, if it wanted to be a truly multi-national company it needed a larger presence in the Japanese market—where, though an industry leader in world terms (1982 sales $3bn), it ranked only 32nd or 33rd, Mr Wright says.

The natural base on which Merck started to build its larger presence in Japan was NMB (Nippon Merck-Banyu), the joint venture which it had operated with Banyu for 30 years. Merck and Banyu officers worked to acquire a more thorough knowledge of one another's corporate structure. In February 1982, a toe went into the water with Merck's purchase of 4.99 per cent of Banyu's shares, and Banyu's purchase of 0.8 per cent of Merck's.

In March 1983, merchant bankers S. G. Warburg, who had also advised BOC, moved in to advise Merck. "They came to the conclusion," says Mr Wright, "that it was technically possible to do."

Speculative

Merck had also bought its 30.03 per cent stake in Torii in February 1982, when that company was strapped for cash. Merck's move on Banyu started Torii's shares rising on speculative hopes, and Merck had to make a rapid decision as to whether it wanted to consolidate Torii or not. It decided to go ahead, and spent $11m on buying a further 20.5 per cent of Torii, mostly in newly-issued stock.

Mr Wright suggests several factors which smoothed the way for Merck. Most important was the gradual getting-to-know-you approach. "Any company that tries to move aggressively (in Japan)," says Mr Wright, "is going to face trouble." Merck's approach came at a time when Japan was emphasising the openness of its economy, and Merck took a "Japanese" view of Banyu, seeing it as a corporation of people rather than as a balance sheet to be bought and sold.

If BOC and Merck were able to make successful equity investments because they had appropriate technological gains to offer, the way is far from open for corporate acquisition in Japan on an opportunistic or predatory basis. "You have got to offer a Japanese company much more than just money," says one analyst. Japanese companies would themselves fight shy of a contested takeover: the idea of a foreigner trying such a thing would be unthinkable. It is a country, after all, in which the word for "takeover" also means "hijack."

LEASING: Robert Cottrell profiles Orient, a company at the heart of the business

Competition in a growing market

ORIENT LEASING company and the Japanese leasing industry have grown up with one another. In 1964, the newly-founded Orient was one of only three leasing companies in the country. Today, membership of the Japanese Leasing Association approaches the 200 mark, with Orient its largest member. In recent years, Orient's share of Japan's leasing market has hovered around the 10 per cent level.

For Japan's leasing sector as a whole, new contracts (measured by amounts receivable) totalled Y2,396bn ($1.6bn) in the year to March 1983, up from Y1,933bn a year earlier, and more than double the Y1,057bn seen in 1978-79. Leasing contracts in 1982-83 (measured on a purchase basis) represented 4.86 per cent of private capital investment in Japan that year. Up from 3.67 per cent in 1981-1982, and 3 per cent in 1980-81.

Measured by its proportion of national capital expenditure, Japan's leasing industry is relatively small. Levels of 10 to 15 per cent are seen in the U.S. and some European countries. Mr Kinai Shimamoto, a managing director of Orient Leasing, believes that the value of new leasing contracts could triple in the next five years or so, if Japan's economy as a whole continues to show real growth.

While the market may be growing, so is the competition among smaller companies to win a larger share of it. Increased competition is shown in a variety of ways. Leasing companies are driving down their own margins to wafer-thin levels, sometimes by offering leases at prices reflecting the cost of cheaper short-term funds, even though the lease is generally a long-term contract. Though Japan's interest rates are stable by world standards, the lessor's financial risk is increased.

As more customers seek leasing facilities, so the leasing companies may be inclined to slacken credit standards, particularly for newer, smaller, clients. Banks in Japan tend to make long and detailed analyses before extending loans to new customers. Leasing companies pride themselves on being able to make quick decisions, based on the profitability in operation of the piece of equipment for which leasing is proposed. Competitive pressure to give a quick "yes" to a new customer may increase a leasing company's credit risk.

Orient's size and established client-base are important competive edges in such a market. It can seek out the cheapest possible funds by tapping not just domestic banks, but also international capital markets. In 1973, it was the first Japanese company to issue Asia-dollar bonds. In 1980, it issued convertible bonds in the London market.

Experience and expanding business have also helped Orient establish effective credit-checking witout sacrificing the ability to make speedy decisions. Mr Shimamoto concedes that, in the beginning, the company had quite a few doubtful debts. Now, he says, the ratio is "very low—less than 1 per cent."

A further advantage of size is that Orient maintains a network of marketing offices throughout Japan. This is particularly attractive to a manufacturer or distributor of capital goods who wants to attract customers by offering his product together with a tailored financing package. Such a manufacturer or distributor may well prefer to associate his product with a single lessor nationwide, rather than assigning business to different lessors in different parts of Japan.

Tax advantages

The rise of Japan's leasing industry is notable particularly because it has taken place in a fiscal environment which does not afford in leasing contracts the tax advantages prevailing in many other countries. Government and industry officials cite several reasons for the industry's nonetheless rapid growth.

One is the relative speed with which financing can be obtained. Mr Shimamoto says that Orient will say "yes" or "no" to a customer within two or three weeks, against the two or three months which a bank might take to approve or refuse a loan.

Another important factor is the suitability for leasing of equipment which, by virtue of technological advances, may rapidly become obsolete. This consideration is reflected in the high proportion of Japanese leasing contracts associated with office automation equipment. Such equipment accounted for almost 41 per cent of new leasing contracts in the year ended March 1983, including 29 per cent attributable to data processing equipment.

Industrial and machine tool contracts accounted for a combined 24 per cent — such that the office and industrial sector together account for over three-quarters of all Japanese leasing contracts in 1982-83.

Orient's own leasing activities have spread, over the last decade, far beyond the domestic market. In 1971 it opened its subsidiary, Orient Leasing (Asia), in Hong Kong. It now has other wholly-owned subsidiaries in London and New York, and joint ventures from Peking to Sao Paulo.

Its "big-ticket" contracts include cross-border ship and aircraft business, the latter encouraged by Japanese Government initiatives in 1978-79 to utilise the country's surplus holdings of U.S. dollars. Orient offers "shogun" (Yen-denominated) and "Samurai" (U.S. dollar denominated) aircraft leases.

Shogun leases have been particularly popular in recent years among airlines which had a significant Yen-denominated income stream and were keen to profit from lower yen interest rates. However, lower

CONTINUED ON NEXT PAGE

Sudden change-over from the old cash society

Credit cards

YOKO SHIBATA

A YOUNG JAPANESE man was detained by officials at Heathrow Airport. He was a suspect, not because of his appearance but because he carried a bulging wad of notes totalling $10,000 with his passport. But there was a simple explanation: like most young Japanese, he had saved hard for his trip—by working for three years as a waiter and had taken the money with him in cash.

Eighty per cent of the money spent abroad by Japanese travellers is taken from Japan this way, with the rest made up in the form of traveller's cheques or credit cards. Japan is still very much a cash-oriented society, which often surprises Western visitors. A traditional reluctance to be in debt, combined with the safety of Japanese society, has made the Japanese shun credit cards.

However, the post-war generation which now comprises more than half of the Japanese population, buys on credit and the number of Japanese credit cardholders has increased explosively—from 18m in 1980 to 48m by end of March 1983.

Still only one in four of Japanese consumers is a credit card holder, a far cry from the situation in the U.S. where four or five credit cards are held by one person. Thus, from any point of view, Japan's credit card market is bound to grow.

There is fierce and growing competition for credit card customers among a wide variety of businesses — credit sales organisations, commercial banks, and retailers, as well as newcomers like regional banks, credit associations, labour credit associations, the Japan travel Bureau and cosmetic companies.

Last year, Nippon Shinpan, Japan's largest consumer credit company topped the list for the number of credit cards issued, totalling 5.6m cards, including 2.4m cards under its own name, and 3.2m issued under the brand name of its affiliated retailers, such as Isetan department stores and Dai-ei supermarket. It was followed by an instalment sales company which had 5.3m house cardholders.

The commercial banks are also active in the credit card boom. However, they had been barred from engaging in credit card business until the Banking Law was changed in April last year, and were operating instead through affiliated companies.

Among bank-operated credit companies, the JCB (Japan Credit Bureau) is the foremost with the largest number of credit cards issued under its own name, a total of 3.7m cards. The oldest was started in 1960 by Sanwa Bank, then joined by Mitsui, Daiwa, Kyowa and Hokkaido Takushoku Bank.

Bank-operated credit companies have the advantage of access to cheap funds but their activities are regulated by the government. For example, they are not able to issue instalment payment credit cards.

Meanwhile, credit sales companies such as Nippon Shimpan and Marui are vigorously promoting their credit cards, with the instalment credit card system as a major weapon. To counter this, commercial banks such as Daiichi Kangyo, Fuji, Taiyo Kobe, and Saitama set up their own credit company called Union card last February, through a tie-up with MasterCard of the U.S. Both Mitsubishi Bank through its "Diamond Credit" company, and Tokai Bank through its "Million Card" company also teamed up with MasterCard. Sumitomo Bank is linked with Visa International, the world's largest credit company, setting up "Visa Japan."

Regulated

Bank-operated credit companies are emphasising the great advantage of international services for Japanese tourists abroad through their links with the international card companies such as AmEx, Visa, MasterCard or Diners Club.

At the same time, the international credit card companies such as American Express, Visa International, or MasterCard are making great efforts to increase credit card business in Japan, which they consider to be one of the most promising markets.

American Express launched its AmEx Japanese Gold card from its traveller's cheque base for people in top income brackets in May 1980. And because of the huge growth of Japan's credit card market in the past two years, the company has decided to tap middle-income spenders by issuing the AmEx Green card. Visa International, the world's largest credit card company, has been operating in Japan through Sumitomo Credit Service, an affiliate of Sumitomo bank. Visa has now decided to revamp its operation in Japan, however, by entering into arrangements with other credit card companies and city banks. It has also set up a branch in Tokyo to promote its soon-to-be introduced "Electron card," which gives cardholders instantanetous authorisation of transactions at the point of sale and automated recording of cash withdrawal at all member financial institutions throughout the world.

JCB is the only Japanese credit company to venture into an international credit card operation by tapping the vast shopping power of Japanese travellers abroad. The Japanese government allowed domestic credit cards to be used internationally in 1978. JCB has now signed up more than 35,000 businesses in Hong Kong, Macao, Taiwan and Hawaii covering more than 70 per cent of the Japanese tourists' popular destinations.

This summer JCB made a further inroad into the world card market, so far dominated by the big four U.S. companies, by starting issuing credit cards to non-Japanese nationals abroad. In the initial year, it hopes to issue about 10,000 of those cards.

Homes

Credit cards are enabling Japanese banks to take an early lead in electronic banking, or "home banking," linking banks with homes by computer networks for easy and quick financial transactions, where the credit card plays a key role.

Since October, Japan's 63 regional banks, led by Bank of Yokohama, have provided a cash and credit card service which enables cardholders to deposit and withdraw cash through an automatic teller machine, and to apply for credit loans and small amounts of cash for purchases at retailers.

Even before the start of the new system, regional banks have received more than 600,000 applications for the card and expect to have over 3m credit cardholders within three years. This will pose a great threat for the commercial bank-operated credit card companies led by JCB cards, according to a spokesman for the Regional Banks Association.

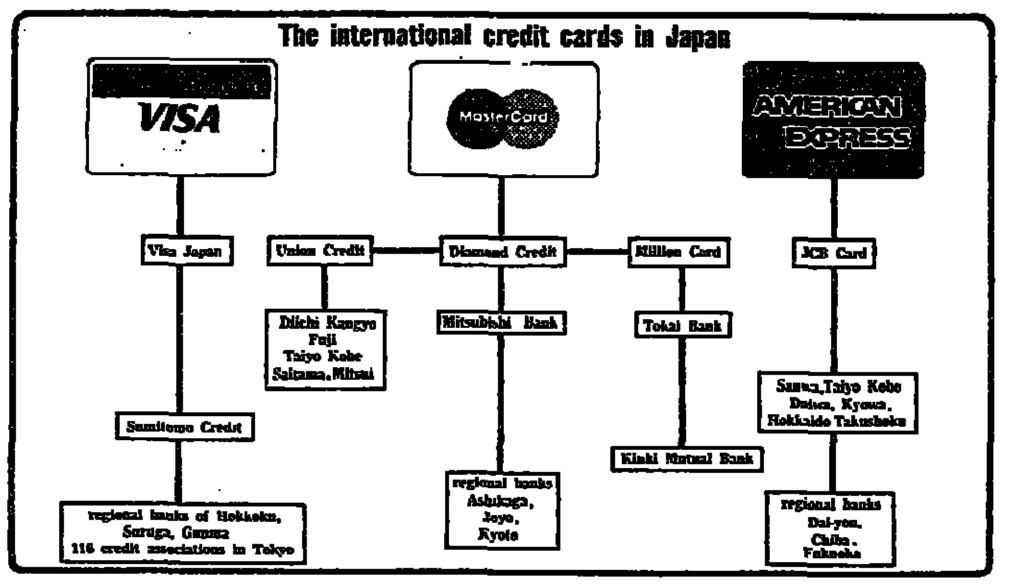
The Japanese have been slow to get used to credit cards, but very quick to adopt to mechanisation or electronic banking. Currently, moves are afoot to set up a joint on-line credit card system across the nation to speed the checking of credit-worthiness of holders at sales counters. However, two different computer on-line systems are competing and government officials are concerned that the two different systems will give rise to confusion among cardholders and retailers.

Last month, Nippon Telegraph and Telephone Corporation (NTT) launched its "CAT" (Credit Authorisation Terminal) service for Japanese bank-operated credit companies, stealing a march on a similar system called "Credit Authorisation Network" (CATNET), developed by IBM Japan.

The CAT service has started with 148 terminals installed at member shops and will be expanded to 10,000 terminals by 1985. Both camps are competing fiercely to recruit smaller institutions to use their on-line systems. Agricultural co-operatives and credit associations are joining the bank-operated CAT system from autumn next year.

With the rapid growth of the credit card market, the Japanese government has been working to ease various obstacles. Officials of the Ministry of International Trade and Industry (MITI) are revising the hire-purchase laws to allow banks to issue instalment payment credit cards and grant rights for consumers to refuse payment to credit companies, if they are not satisfied with the commodities or services they have bought.

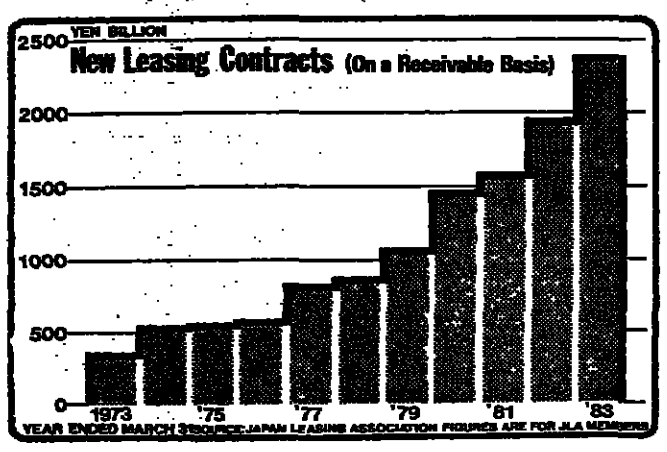
MITI is also working on the unification of Japan's credit cards to the international standard to conform on such details as size and the number of magnetic digits, particularly in view of the rapid changes towards combining credit cards with electronic banking. Current differences in the various cards create great inconvenience for retailers, who have to instal as many different terminals as types of cards.



JAPAN'S TOP TEN CREDIT CARD COMPANIES*

	No. of cards (m)	Per cent growth 1981-82	Type of business	Cards issued to affiliated retailers (m)
Nippon Shinpan	5.60	15.9	Instalment sales	3.2
Marui	5.30	13.3	Retailer	—
JCB	3.67	7.6	Bank-operated credit card	—
Union Card	2.68	1.1	Bank-operated	—
Seibu distribution group	2.64	34.0	Retailer	—
JACKS	2.60	21.9	Instalment sales	1.9
VISA Japan (Sumitomo bank)	2.23	10.0	Bank-operated	—
Diamond Credit	2.00	20.4	Bank-operated	—
Orient	1.90	81.0	Orient Finance instalment sales	0.69
Million Card	1.75	6.1	Bank-operated	—

* March 1983.



Competition in growing market

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recent U.S. dollar interest rates have made yen-denominated contracts less attractive to regional leases of aircraft and other equipment.

As well as diversifying internationally, Orient has aimed for a broader base of finance-related activities within Japan. In 1979 it established a consumer credit subsidiary, and in 1980 began making housing loans.

Specialised

In 1982 Orient established a joint-venture with IBM and Morgan Guaranty International Finance Corporation, to provide specialised leasing services for medium-to-large IBM computers.

Orient's president, Mr Yoshihiko Miyauchi, has described his company's expansion as a fairly pragmatic business. "There's a certain amount of luck involved," he noted in Orient's last published annual report. "If an area looks promising, we'll try it, but we won't make an absolute commitment. If it doesn't prove profitable, we withdraw."

An important consideration for Orient's expansion has been the presence of suitable joint-venture partners. OLC only started consumer credit, noted Mr Miyauchi, when "an experienced partner encouraged us to." In its overseas joint-venture leasing companies, Orient has both a local partner and, where possible, a close relationship with local banks as a source of local currency funds and of knowledge of their domestic market.

Orient's overseas companies do most of their business with companies based in their country of operation, rather than with Japanese companies investing in the area.

Orient will soon be 20 years old — a time for celebration but not relaxation. "Every month a new leasing company is born," Mr Shimamoto observes.

Adoption of MSX brings a new era

Small computers

CHARLES SMITH

JAPAN'S personal computer industry entered a new era in the second half of 1983 with the adoption by 16 computer and consumer electronics manufacturers of the MSX operating standard for very small home use computers.

MSX, which was developed by the U.S. software company Microsoft Corporation, is a system which enables the user to start operating the computer immediately after the insertion of a software package which comes in the size and shape of an audio cassette tape box and which costs between Y4,000 and Y5,000 ($17—$21) per programme.

The MSX machine itself which is now being made in Japan by nine manufacturers can be bought for as little as Y49,000 ($210) or as much as Y100,000 ($425) if a number of extras are included.

Matsushita Electric, the company which led the movement among Japanese companies to adopt the MSX standard, expects about 150,000 computers to be produced during the current fiscal year (ending in March 1984) and perhaps as many as 700,000 in the 1984-85 fiscal year. If Matsushita's forecasts are correct it would seem to follow that roughly half of the very small personal computers made in Japan from spring 1984 onwards will be MSX models.

The MSX standard, which combines a basic operating system together with some common hardware specifications, "arrived" in Japan in summer 1982 when the system was explained to Matsushita by Microsoft's Japanese agent, ASCII Corporation.

Mr Yuji Oshinomi, an executive in Matsushita's Corporate Planning department concerned with computers, says the system impressed Matsushita by its simplicity and because it promised a sharp reduction in production costs as compared with other small personal computers. Matsushita accordingly took the initiative in organising an MSX committee, consisting of other computer and consumer electronics companies which began its sittings in December 1982.

The committee encountered some initial difficulties in the shape of resistance by "one major manufacturer" (whom Matsushita declines to name). By May 1983 however, general agreement had been reached on the adoption of the MSX standard by 14 companies, with two more joining during summer.

A crucial factor in the decision to go ahead with MSX was a sharp reduction in the amount of royalties originally demanded by Microsoft and ASCII from what Matsushita describes as a "very high" initial request.

Another decisive point was Microsoft's decision to charge Japanese software companies a nominal fee of only Y5,000 to produce software packages conforming to the new standard.

With the adoption of the MSX system agreed in principle by the middle of 1983, individual manufacturing members of the group set about the task of commercialising the new standard with traditional Japanese speed and efficiency. Matsushita, first of the 16 companies to put an MSX computer on the market, began selling its machine at the end of October and is now turning them out at the rate of 15,000 units per month.

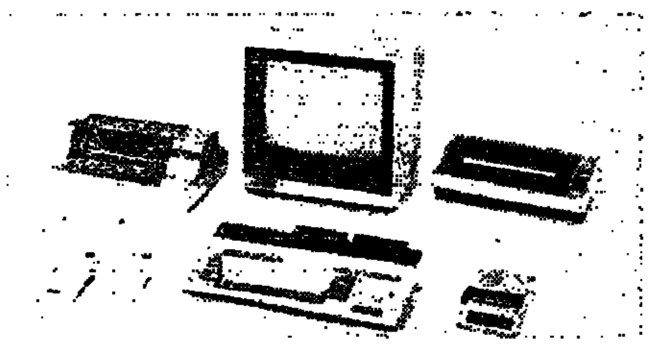
Other companies already in production include Toshiba (10,000 units per month) and Mitsubishi Electric (5,000 per month).

Share

By the end of 1983 all MSX producers are expected to have either announced or begun to make their machines with the possible exception of NEC, Sharp and Casio—the three companies which held the largest share of the market for small personal computers before MSX made its debut.

The group of 16 companies includes two, Nippon Gakki and Japan Victor Corporation (JVC), which are new to the computer business, although both have wide experience in other fields of advanced electronics. Several other members of the group, including Matsushita itself, traditionally have been thought of as general purpose consumer electronics manufacturers rather than as computer specialists.

According to Matsushita's Mr Oshinomi the MSX computer's uses extend from computer games (of which some dozens are already on the market in Japan) through educational programmes for children to housekeeping uses such as the preparation of tax statements and simple business applications of the kind that might be of interest to companies with, say, 20 to 50 employees.



Matsushita's CF-200 MSX computer and peripherals. The company has led the movement by Japanese makers to adopt the MSX standard

The MSX can be used to compose music, with the aid of a programme which first asks the user what rhythms and time signatures he wishes to use and then proposes music for each bar which the user can either accept or reject.

Programmes for children include an arithmetic programme designed for sixth graders in the Japanese primary school system, an English composition programme for junior high school students and a physics programme for senior high school students.

Matsushita estimates that about 250 MSX programme packages will be on the market by the end of the year and that about 1,000 should be available by late 1984. The fact that software houses that have joined the MSX group can sell programmes for use on machines made by 16 different companies instead of for a single machine should prove an enormous incentive to the composition of MSX software, Mr Oshinomi says.

Matsushita is inclined to be vague about the long-term future for MSX but some companies are ready to predict that within five years or so about 20 per cent of Japanese households may have acquired MSX computers. (This compares with the 12 per cent of homes that so far own video tape recorders and the 50 per cent that have bought audio systems.)

A key factor in the long-term prospects for MSX, according to Matsushita, will be the extent of progress on the nationwide digital information network that has been proposed by Japan's state telecommunications entity, Nippon Telegraph and Telephone. If the NTT "Information Network System" becomes a reality by the late 1980s the MSX computer could find a role as a terminal for the system.

This would mean that MSX computers might be installed in Japanese households in much the same way, and for much the same reasons, as telephones are installed today.

Reality

The adoption of the MSX system poses questions about the future in Japan's domestic market for non-MSX personal computers such as the range of models pioneered by NEC Corporation; but for the time being no one seems to have a very clear answer to such questions.

What is being said, in general terms, is that MSX machines probably will take over the lower end of the market for eight-bit personal computers while allowing sales of some of the more expensive eight-bit models that offer functions not included in the MSX system to continue.

A computer which could well survive the MSX revolution is NEC's 6001 which sells for Y84,000 and offers substantially more to the user than the MSX system. Sixteen-bit personal computers, which can now be bought in Japan for as little as Y150,000 (for a newly introduced Casio model), represent a different sector of the market and will be largely unaffected by the introduction of MSX.

The 16-bit computer, however, could itself ultimately become a candidate for standardisation in Japan, with IBM Japan's newly-introduced 5550 model offering a likely starting point.

A final set of questions posed by the emergence of the MSX standard concerns the impact of the Japanese move on computer makers in other countries. Matsushita's Mr Oshinomi says that exports of the MSX will probably start in mid-1984 with manufacturers aiming to build up stocks in time for the Christmas shopping season in the U.S. and Europe.

While Japanese exports get underway, U.S. and European computer and electronics manufacturers may themselves be considering adoption of the MSX standard. Companies that have shown an interest in MSX outside Japan are said to include General Electric of the U.S., Philips of the Netherlands and a number of other European electronics manufacturers.

If such reports are correct, MSX could be on the way to adoption as a world standard for very small computers in much the same way as the VHS system seems to be establishing itself as a world standard for half-inch video tape recorders. MSX and VHS share the common feature of having been promoted by Matsushita Electric although neither system was originated by Matsushita in the first place.

A proliferation of new media

Database services

JUREK MARTIN

THE Ministry of International Trade and Industry (MITI) divides what it classifies as the "information services sector"—a Y805bn ($3.4bn) a year industry in fiscal 1981, the last measurement year—into five categories.

Of these, the second smallest, but the fastest-growing, is what is known as information providing services—in other words data banks. In that year, data bank services available in Japan were generating Y60bn in revenues, had been expanding at an annual rate of 26.1 per cent over the previous five years and may well be able to sustain that rate in the years ahead.

There is a suspicion that Japan, not unlike many Western nations, may be confronted with something of a dilemma in the proliferation of "new media" services, in that they are coming on stream at a rate faster than the general public, still catching up with technological advances, can absorb.

A midsummer survey by the Prime Minister's Office, for example, found that 60 per cent of the public had no real appreciation of what "new media' were and that, of all the information currently available in Japan, only 7.2 per cent of it was actually being "consumed."

This percentage may rise rapidly as the nation becomes more "wired" than it is at present. But it is a concern which, so far does not appear to have affected the data base business in Japan for the principal reason that it has been geared to providing information not to the public at large but to a market.

This market is the big companies and financial institutions, government and the acedemic world who suffer from neither a lag in technological sophistication nor from the simpler problem of only understanding the Japanese language.

According to Mitsubishi Research Institute (MRI), extrapolating from both industry and Miti data (the Ministry this spring published the first ever Japanese directory of data bank services) there were earlier this year 604 data bases—available in Japan: of these 234 covered business and finance, 209 natural sciences and technology, 54 the social sciences and humanities, 50 could be classified as general, 35 were multi-disciplinary and 22 were listed as "others."

Of these, and allowing for the considerable overlapping of the information provided, 334 constituted foreign-sourced data bases and only 122 could be firmly placed as original Japanese systems.

Definition

This proportion, incidentally, is very much in line with a different survey published in November by the Post and Telecommunications Ministry which, using a very broad definition of the word, found that "information" flowing into Japan outnumbered that flowing out by approximately a three-to-one margin.

Operation of data base services in Japan is catholic. The Data Base Services Industry Association, formed only in 1979, had by last spring, 31 members; of thse eight were research institutes, most affiliated with major industrial and financial concerns, seven information processing centres, four newspapers and wire services (Nihon Keizai Shimbun, whch boasts the most comprehensive source materials. Asahi Shimbun and Jiji and Kyodo news agencies), three each from publishing (including Maruzen and Kinokuniya, Japan's best-known bookstores) and from manufacturing, two each were credit rating services and software institutions and one each represented a commercial bank and an academic association.

By no means all the providers of data base services have, to date, set out to make money. The research institute, like MRI and Nomura Research Institute, were established in the first instance to meet the in-house needs of their large parent corporations, of which data services were but a part. Only recently have they begun to market their wares more widely.

But even the most ambitious of them, which is certainly Nomura Securities' global information system, carrying the "Capital" brandname, is not seen as a profit centre, according to Mr Yoichi Kamina, deputy general manager of the firm's overseas division.

Capital (short for computer aided portfolio and total analysis) constitutes a genuinely comprehensive financial, economic and business data base, drawing not only on the resources of the Nomura Research Institute, said to be Japan's biggest "think tank" but on such providers of raw data as the IMF, the OECD, plus newspapers and specialised publications around the world. It offers a 24 hour, 365 day-a-year on-line service to subscribing clients.

In the 18 months it has been available in Japan it has attracted 800 customers, half of them financial institutions; in October, Nomura began to market the system overseas. But Mr Kamina insists, Capital should be seen more as a major addition to Nomura's existing facilities rather than as a money-spinner in its own right; though he refuses to disclose charges, he does add, coyly that Nomura does hope the system breaks even.

The biggest Japanese security house is not alone in expanding its data base services to a foreign market: Daiwa Securities, for example, has also this year gone the same route. Indeed, a general assessment of the industry points out clearly that in Japan, as elsewhere, the most tempting developments are in the financially-related area. The largest single operation currently in existence is the one-way desk-top service giving Japanese stock market prices.

Of obvious growth potential are credit rating services. Japan, traditionally a cash-oriented society which rewards savers not borrowers with tax breaks, remains relatively backward in consumer finance, is changing rapidly. But, in preparing for the expansion of consumer credit, necessary data is still lacking.

Criteria

According to Sumitomo Bank, the existing credit rating data banks have only about 4m names on file (the employed labour force is 57m strong) and have not really established proper criteria for judging the creditworthiness of those they do have. Nor has Japanese law yet addressed such inevitable and important questions as the privacy of credit records, what input goes into them and what access the consumer has to them.

The Government is to establish a consumer finance research committee next spring to examine all the implications, but some time seems bound to elapse before the necessary framework is established. Once it is, a substantial new subsector of the industry will be in a position to take off.

However, some existing marketers of data base services are in the business of turning profits. This is true of both the Maruzen and Kinokuniya operations, which together constitute the large secondary vendors of foreign data bases, and also of Nihon Keizai Shimbun's facilities, which also draws extensively on overseas source material.

To date, this has almost exclusively been from the U.S. and Canada, though Kinokuniya has recently acquired distribution rights to West German Scientific Data Base in Karlsruhe.

JAPANESE INDUSTRY VII

Lagging well behind industry in the U.S.

Computer software

CHARLES SMITH

JAPAN may be technically a match for the U.S. as a manufacturer of computer hardware but its software industry still lags far behind. Japanese software "houses" tend to be much smaller than their American equivalents and the supply of capable programmers and systems engineers available to the industry is extremely limited. Another major problem facing Japan's software industry is the lack of any clarity in the laws relating to software copyrights.

These and other factors add up to what officials at the Ministry of International Trade and Industry describe as a state of "industrial infancy." MITI officials add, however, that they are working hard to strengthen the computer software industry and that adolescence, if not full maturity, may not be too far ahead.

According to MITI estimates, independent computer software houses in Japan sold about Y300bn ($1.2bn) worth of programs in the fiscal year running from April 1982 to March 1983, or nearly twice as much as they had sold three years earlier. Software sales next year could exceed Y450bn according to the Japan Software Industry Association (an organisation which groups only the largest 150 or so software houses).

Sales of computer software by specialised "houses" account for only a small fraction of the total amount of computer programming being done in Japan. Programs written by computer manufacturers for their own use are probably worth between Y500bn and Y600bn per year while the value of software written by computer users is estimated to run well into thousands of billions of yen.

Taken together, the various different types of software produced in Japan are probably worth considerably more than the output of computer hardware.

The number of companies actively involved in the software business is hard to estimate given the fact that many enterprises have only one or two staff but the industry association believes there may be at least 1,000 "houses" in Tokyo and perhaps as many as 2,000 in Japan as a whole.

Big software makers employing 1,000 or more technicians are often affiliates of hardware makers such as Hitachi or NEC, or joint ventures between hardware manufacturers and trading companies. Smaller "mansion type" companies can be family enterprises operating with a minimum amount of capital and equipment.

MITI estimates that the combined sales of the 10 largest computer software houses in Japan amounted to Y98bn in 1982 but points out that this represents only 12 per cent of the Y789bn worth of sales registered by the 10 largest software companies in the U.S. Part of the difference in size and strength between Japanese and U.S. software houses is accounted for by the fact that operating systems software is very seldom written by independent houses in Japan. This contrasts with the situation in the U.S. where big companies such as Microsoft have specialised in the writing of operating systems.

Another difference between the U.S. and Japanese industries involves the relative importance of "customised" and "package-type" software. Japanese software houses are mainly involved in turning out programs that have been ordered by users or by computer manufacturers. U.S. companies on the other hand turn out amounts of ready made software.

The software package available as an option with this Toshiba T-200 small business computer provides full accounting facilities. The various types of software produced n Japan are probably worth much more than the output of hardware.

Sales by computer software houses

	Ybn
1978	88.97
1979	174.65
1980	209.07
1981	227.54
1982	300.09

Fiscal year running from April 1 to March 31

Protection

Readymade or packaged software is cheaper and quicker to use than the customised variety but normally requires the protection of copyright laws, which are more highly developed and clearer in their application to the computer business in the U.S. than in Japan.

MITI is attempting to promote the development of package software by a planned revision of the copyright system and by improving the distribution channels available for software packages.

In time this should help the industry to diversify away from its dependence on customised products but the changeover may not be rapid. The extent of Japan's reliance on imported software packages is highlighted by the fact that early in 1983 no fewer than eight out of the top 10 packages on the domestic market were American.

The extreme shortage of skills which is one of the software industry's other major problems is a "natural phenomenon" in a young, fast growing industry, according to MITI. However, the existence of roughly three-to-one imbalance between the supply of computer systems engineers and programs and the demand for such people seems to be creating serious problems.

Fast-growing software makers like ASCII Corporation (a specialist in personal computer programming) admit to being worried about losing some of their key personnel and have had to increase wages extremely rapidly to keep staff.

Some small and medium-sized software companies have been hit by "spin-offs" of groups of workers who have left to set up business on their own.

The danger of mass walk outs of this kind, according to an official at the Software Industry Association, is that the "parent" company may become unable to "maintain" software already supplied to clients without the qualified, staff who originally wrote the programs.

MITI is trying to combat the shortage of highly-qualified workers in the software industry by organising qualifying examinations in some of the basic skills needed, but officials say that preparation for such examinations is—and should be—something for young people to do on their own.

At a more basic level, the Ministry is trying to upgrade the fundamental technical competence of the software industry.

A research agency operating under MITI's wing is spending Y2.5bn per year on a series of research programmes in which software houses participate. Results of the research are available for commercialisation by the industry. MITI expects to be paid by participating companies only if government-funded research eventually enables them to increase their profits.

A final form of assistance by the Government to computer software houses takes the form of loan guarantees or subsidised loans to companies that have got far enough to have a future (in the view of Government officials) but which may not yet have been able to attract the support of banks.

This sort of support is normal in industries that the Ministry of International Trade and Industry regards as strategically important. It is particularly necessary in the software industry given the reluctance of banks to lend money to companies that lack tangible assets as securities for bank loans.

MITI's assistance for computer software is likely to be maintained until the industry reaches a measure of maturity but official emphasis that the government is in no sense propping up a sector of the economy which would otherwise be unable to stand on its feet. Japan's computer software industry is a lusty infant that shows every sign eventually of growing up to be a formidable competitor in world markets.

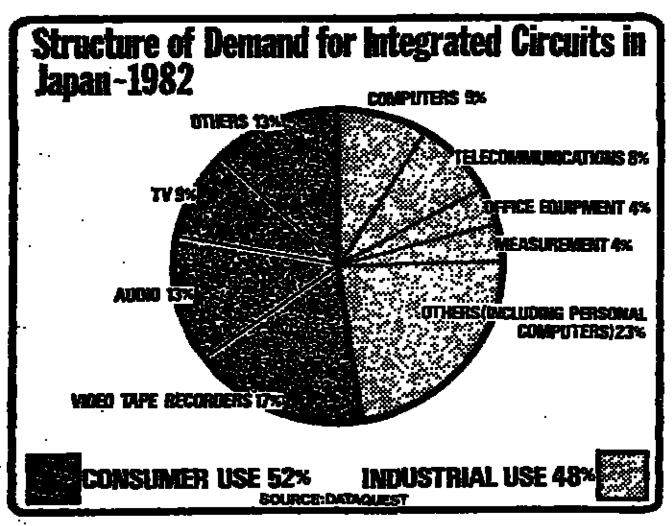
Shipments of new chip begin

Integrated circuits

ROBERT COTTRELL

JAPAN'S semi-conductor manufacturers stand poised to begin mass production of a new generation of micro-chip technology. Sample shipments have begun of the much-awaited 256K D-ram (256,000 bit dynamic random access memory) integrated circuits, whose world sales are likely to surge into billions of dollars over the next three to five years.

It is not, however, as though the industry needs a new product line to stimulate interest by customers. An unprecedented feature of the current year has been a widespread shortage of all types of semi-conductors, not only in Japan but in the U.S. also. By July this year, orders placed with Japanese manufacturers were outstripping production by 1.5 to one. Prices of mass-produced circuitry have stopped falling. Spot quantities of hard-to-find circuits have been bid up to reportedly astronomical levels in occasional dealer-transactions. The booms in personal computers in the U.S., and domestic electronics goods such as video-cassette recorders in Japan, have left manufacturers besieged by customers pleading to secure supplies.



The manufacturers have recently been boosting their sales of non-standard circuitry with devices adaptable to a client's particular needs, which in turn reinforces demand.

Limited

To equip and commission a high-tech electronics manufacturing plant can take from one to two years, so manufacturers have a limited flexibility of response to recent levels of integrated circuit demand. Most, however, are looking to long-term buoyancy in the semi-conductor markets.

Capital investment as a proportion of sales has been rising across the board, and very sharply in some companies. Japanese manufacturers have always been strong in high-volume memory chip production. Lately, however, they have also been boosting their sales of non-standard circuitry, with devices adaptable to meet a particular client's needs becoming one of the industry's fastest-growing sectors—a market regarded as a stronghold of American manufacturers.

The success of Japanese manufacturers in both domestic and export markets has provoked from their U.S. counterparts protests of unfair competition, including allegations that the Japanese Government has supported research cartels among Japanese manufacturers to pinpoint and dominate market sectors. The present strength in worldwide demand for semi-conductors may have helped alleviate some of the so-called "trade friction" between Japan and the U.S.

Both countries have agreed to study a mutual abolition of semi-conductor tariffs next year. It may, however, be the battle for the 256K D-ram market which once more inflames relations between manufacturers on the two sides of the Pacific.

The 256K D-ram chip will succeed the 64K D-ram as the mass-production "state of the art," and offer four times the memory capacity. Six Japanese semi-conductor manufacturers have already displayed their own prototypes of the chip. Some have begun trial shipments to clients. NEC, Japan's largest semi-conductor manufacturer, is ready to make 100,000 256K D-ram chips this month. American manufacturers, led by Western Electric, are preparing to do battle.

Fresh in the industry mind is the advent of the 64K D-Ram, which saw the Japanese manufacturers steal a decisive march over U.S. rivals. Helped by heavy research and development expenditure in the late 1970s, Japan's manufacturers won through a cut-throat year of 64K D-ram marketing in 1981 to emerge producing 70 per cent of the world's 64K D-ram chips in 1982.

In volume and value terms, the world 64K D-ram market in 1981 comprised sales of 10m chips worth $100m. Volume in 1982 jumped to 100m chips, with falling unit costs cutting value growth to $550m, according to estimates by the Japanese brokerage house Nomura. Nomura expects 1983 sales to total 350m chips, worth $1.4bn, and 1984 to see sales of 600m chips worth $1.68bn—reflecting a fall in average unit selling price from $10 in 1981 to $2.8 in 1984.

At present, unit selling prices for 256K D-rams would be around the $30 to $40 mark, as production volume increases, prices are likely to fall sharply. Demand for the new chip is likely to reach the strongest levels when its price-per-bit (ie price per unit of memory capacity) falls below that of the 64K D-ram. Mr Kazuo Kimbara, director and general manager of Hitachi's semi-conductor and integrated circuits division, expects a crossover point to come in 1985.

For the time being, Japanese manufacturers are holding a fairly low profile on their 256K D-ram programmes. Part of the reason, Mr Kimabaran concedes, is a concern to avoid offending U.S. manufacturers. More importantly, he says, "64K business is profitable enough."

The broad pattern of demand for Japanese semi-conductor products has reflected strong growth in both domestic and export markets. Domestic sales of Mos IC products, which include memory chips, leaped 70 per cent year-on-year in second-quarter 1982, to reach Y123.57m, while linear integrated circuits showed a second-quarter year-on-year rise of 28 per cent.

Turnround

Most striking still was the turnround in demand for discrete components, which showed a 20 per cent sales increase in second-quarter 1983 after four consecutive quarterly declines, according to figures prepared by the Ministry of International Trade and Industry.

The boost in discrete IC sales reflects resurgence in demand from audio, VCR and television manufacturers, who together—according to Nomura estimates—account for 52 per cent of demand for discrete ICs, and 73 per cent of demand for linear ICs. VCRs, in particular, are one of the most important determinants of Japanese semi-conductor demand: industry analysts say that the duration of current tightness in some types of semi-conductor supply may be prolonged by demand for VCRs related to next year's Olympic Games.

Exports of integrated circuits from Japan have also forged ahead, led by strong demand from U.S. computer manufacturers and assemblers. Exports to the U.S., which had declined two per cent in 1981, rose by 64 per cent in 1982, by 70 per cent in first-quarter 1983, and by 63 per cent in the second quarter. That expansion is likely to slow in coming months, says Nomura, not so much because of weaker demand but because of limitations on production capacity.

Japanese manufacturers are responding to the need for higher levels of technology and greater production facilities by boosting sharply their new capital investment. Analysts expect the nine leading semi-conductor companies to show much higher semi-conductor related capital expenditure in the current financial year, probably up from a previous Y233bn to Y343bn, a rise of 47 per cent, compared with a 31 per cent forecast rise in sales. The new capital expenditure is expected to be concentrated on semi-conductor manufacturing facilities.

Digital network linkup by the 1990s

Telecommunications

CHARLES SMITH

JAPAN PROBABLY has passed the stage in its economic development where growth is likely to be fostered significantly by investments in conventional industries such as steel or cars. However, it still looks as if the coming revolution in telecommunications could provide a stimulus to the economy.

At the centre of the revolution, so far as Japan is concerned, is the ambitious plan of the state telecommunications entity, Nippon Telegraph and Telephone (NTT), to set up an Information Network System (INS) that will link the entire nation with a single multi-purpose digital communications network by the late 1990s.

INS is now in the very early stages of being implemented but the plan has already become a symbol of the new "information era" in which economic growth will be fuelled more by high technology industries and services rather than by traditional "hardware."

The background to NTT's enunciation of its INS concept is the same as that which has impelled a number of telecommunications authorities in other countries to take a fresh look at their systems in the past few years. One major development has been the appearance of a number of new communications systems, such as facsimile, that work better when messages are transmitted digitally than when a traditional analogue telephone line is used.

A second important change in the situation facing NTT and other authorities has been the rapid emergence of fibre optics technology. Optical fibres, which transmit telecommunications signals in the form of light, can carry a far higher volume of digital information than conventional coaxial cables and therefore offer a highly suitable means of communication in an age when facsimile and data transmission between computers is likely to become increasingly common.

Telecommunications authorities like NTT theoretically have the option of ignoring the new information technologies and sticking to their traditional business of operating analogue telephone systems. However, NTT seems to have been no exception to the general pattern in deciding that it must confront the challenge facing it even if this means rebuilding much of Japan's existing telecommunications system.

One reason why NTT would have been very unlikely indeed to ignore the opportunities presented by revolution in telecommunications technology is that Japan happens to be particularly well suited to "digitalisation." Digital systems tend to work better—or at least more economically—in situations where heavy loads of information are being carried over short distances, as in Japan, rather than in countries like the U.S. where the telecommunications system has to carry relatively small amounts of information over many thousands of miles.

Japan's densely-packed urban communities all lying within a few hundred miles of each other present precisely this first type of situation, although NTT officials say that many European countries should also be well suited to the introduction of digital telecommunications links.

The distinctive point about Japan's position vis-a-vis the digital revolution in telecommunications is that NTT appears to have got itself committed to a pre-digital switching system that could prove costly and time consuming to change. About 80 per cent of the switching systems in use within the NTT communications network are of the conventional cross-bar type rather than of the "time division" electronic variety which is needed to get the best out of a digital communications system.

Switching

A senior NTT official who was closely involved with some of the groundwork for establishing INS believes that Japan may be about 10 years behind the U.S. in making the change to electronic switching systems. In ordinary circumstances, he adds, the corporation would need to allow about 15 years for full depreciation of its conventional switching system before starting a full changeover to digital switching systems.

Part of NTT's solution to the problem of speeding up the transfer to a digital switching system is to try to ensure that its investment in digitalisation earns the maximum return from the beginning. To this end NTT hopes to persuade the largest possible number of telephone subscribers in Japan to start using the new telecommunications terminals (computers, facsimiles and so on) that will generate a high volume of traffic down digitalised transmission lines.

NTT, however, has no intention of making or marketing terminal equipment itself. As with previous stages in the extension and diversification of Japan's telecommunications system, the corporation hopes to mastermind the development of new equipment at its research laboratories on the outskirts of Tokyo and then have it manufactured by the major electronics groups that have co-operated with NTT in the past.

The development of the "mini-fax" home-use facsimile machine under NTT auspices is one recent example of the way the corporation sponsors new developments in hardware that are likely to create additional demand for the telecommunications network. Many such developments are likely to take place over the next few years.

Although much new equipment still has to be designed and developed, NTT officials say that all, or nearly all, of the basic technology needed to establish INS is already available. Success of failure of the INS concept, however, may hinge crucially on whether the system makes sense economically. The costs of the communications hardware that telephone subscribers will have to buy to "join" INS which naturally depend on economies of scale and thus on how many people want to use the system in principle. This question, in turn, will relate to the charges set by NTT in the new bit-based tariff system that will eventually replace conventional telephone charges.

An experimental microcosm of INS in the Tokyo suburb of Mitaka City is already in operation with about 1,000 companies and 9,000 private homes linked to an optical fibre communications system that transmits data between telephones, computers and facsimiles.

NTT hopes to learn much from the Mitaka experiment about how INS will work on a nationwide basis but it seems likely that, even when the experiment ends, many crucial questions will remain unanswered.

NTT has yet to reveal how much it plans to spend on INS over the next two decades but a few rough indicators are available as to the scale of the corporation's thinking. Investments that are directly related to INS already absorb several hundred billion yen per year out of the corporation's annual investment bill of Y1,700bn ($7bn) over the next few years. Ultimately, some 80 to 90 per cent of NTT investment could be going towards the establishment of the systems.

Glyn Genin

Digital telecommunications links are expected greatly to improve the transfer of business information. Above: the foreign exchange dealing room at the Sumitomo Bank, Tokyo.

NTT's investments in INS could well dwarf those of any other Japanese public or private corporation by the late 1980s (with the exception of the electric power industry) but they will form only a part of the total amount of money to be spent. The rest will be coming from the innumerable private companies which will manufacture equipment for the INS system.

A final question about INS concerns the extent to which NTT will actually remain the dominant force in Japan's domestic telecommunications business once the system is established. NTT executives say they expect rival optical fibre networks to be laid down some time in 1980s or 1990s along the new high-speed rail tracks that Japan National Railways plans to build.

Competition could also come from the series of independent cable TV (CATV) networks that are expected to be licensed in Japan over the next few years. NTT's only official comment on all this is that it welcomes competition and that INS should be able to thrive alongside, or perhaps even in conjunction with, alternative means of telecommunication.

Recession has left the big five integrated producers working well below capacity

Victim of its own investment programme

Steel

JUREK MARTIN

JAPAN'S STEEL industry is in what might be described as, if the pun can be excused, an ironic position. No nation has a more efficient, technologically advanced steel industry as Japan, yet few industries have ever been so unexpectedly hoist on the petard of investment in new productive technology as four of the five major Japanese integrated steelmakers when the bottom fell out of the market for seamless pipe.

To compound the irony, at the lower end of the market is the fact that the Japanese steel industry—whose inroads into foreign countries is well known—is now starting to complain that in Japan itself its products are having to compete, at a disadvantage, with subsidised steel from the newly—industrialised countries. The philosophy of several of these is based on emulating the Japanese economic miracle.

Further, the domestic steel industry, an international pioneer in making steel a more versatile commodity, is also having to face up to the domestic challenge of producers of steel substitutes, such new materials as fine ceramics, carbon fibres and titanium.

Rubbing in the ironies are the more generally felt problems of a severe domestic and international recession, from which the signs of recovery are only just beginning to show. Japanese steel mills are still operating at only about 60 per cent of capacity, with more than a third of the country's 65 mills closed down.

In their last reporting half year, ending September 30, the five integrated producers (Nippon Steel, Nippon Kokan, Kawasaki Steel, Sumitomo Metal and Kobe Steel) lost a collective Y57bn ($243m). All but Kobe Steel, which never got into seamless pipe, suffered sales declines of between 11 and 29 per cent, and all five had to sell off securities to meet dividend payments.

Yet in sharp contrast to its European and American counterparts, to whom rationalisation and/or protectionism have become the slogans of survival, Japan's steel industry still believes that the way out of the mire lies in as much new technological investment as can be afforded in basic steel and high value-added production, spiced with parallel investment, though mostly for the longer term, in new materials.

Total steel industry capital investment this year will be in the Y1 trillion ($4.1bn range), a little above last year and not far below the nominal post-recession 1976 mark of nearly Y1.2 trillion. That still accounts for some 10 per cent of all Japanese industrial investment and steel remains exceptional among Japanese industries in the last two years in increasing the levels of capital investment.

It is true that this reflects in good measure what appears to have been a mistaken gamble on seamless pipe, the cycle of investment in which is only now being completed. It will be recalled that in 1981-82 the burgeoning demand by the international energy industry for seamless pipe was more than masking huge recession-induced softness in price for steel sheet and plate.

Alloys

But the collapse in the price of oil and the slump in international energy activity brought the price of seamless pipe down from over $1,400 a tonne to well under $500 a tonne in the space of less than a year. With stocks of pipe still high it is estimated that demand will rise at best to 60 per cent of its earlier levels.

Yet the lesson that the Japanese steel industry appears to have derived from this bitter experience is the need to produce yet more high-quality, high-value sophisticated steel products. Hence the emphasis now on corrosion-resistant sheets, very thin sheet, steels for use in extremely cold climates, new alloys—plus the new focus on goal gasification and previously mentioned new materials, as well as improvement in the quality of such staples as rods, bars and wires.

The five major integrated producers have a total of 32 significant development projects under way this year.

The threat from low-cost imports poses a challenge of a different kind, since it consists primarily of lower grade cheaper steel, principally from South Korea, whose steel industry, of course, Japan was instrumental in developing and, increasingly, from Taiwan. Imports currently account for about 5.5 per cent of the domestic market, but the growth rate has been rapid: up a quarter in the first nine months of this year compared with the comparable period of 1982.

Lower labour costs and government subsidies, plus dumping in Japan of steel at less than prices in countries of origin, are, in the opinion of the Japanese steel industry, the major reasons for this expansion (Japan, of course, used to be accused of precisely the same offences by American and European competitors).

Japanese nervousness was more than apparent this year in the extreme reluctance of the Japanese steel industry to transfer, albeit indirectly, technological know-how to the second planned Posco integrated mill in South Korea, due to come into production in 1988.

Unfortunately for the industry, the government of Mr Yashuhiro Nakasone, intent on improving relations with South Korea, has made economic co-operation a cornerstone of its bilateral policy. Thus Japanese assistance to the second Posco mill will go ahead, with major Japanese manufacturers of plant and equipment, rather than the steel industry itself, acting as the intermediaries.

But it is generally suspected that the Japanese steel companies will carefully monitor what technology is made available to the South Koreans and may even seek to obtain some informal understanding from Posco on limiting exports to Japan as a quid pro quo. There is a natural Japanese reluctance, shared by both government and industry, to be seen at this stage to be raising barriers to trade; after all, existing restraints on trade notwithstanding, Japan exports some 34m tonnes of its projected 99m tonnes production and is not unaware of the irony of the position of those who live in glasshouses.

An alternative is for the domestic industry to meet the imported threat head on, product-for-product, which is eminently within Japan's capacity. After all, more than 80 per cent of crude steel is continuously cast, nearly three times as high a proportion as in the U.S. and nearly twice as high as in Britain and France.

But if the Japanese government has made the industry uneasy in its dealings with South Korea, it has brought the steel companies unalloyed pleasures by the continued improvement in relations with the People's Republic of China. In fact, soaring Chinese demand for Japanese steel, especially for pipe to use in its emerging oil industry, may even take some of the sting out of the seamless pipe debacle.

Japan will probably sell close to 6m tonnes of steel to China this year, at least double the 2.9m tonnes of 1982, which was itself a third higher than in 1981. An estimated ten per cent of this year's Chinese purchases will be for seamless pipe. In all, China now stands as the largest single foreign country market for Japanese steel products.

Plant and equipment expenditure by major Japanese Steel Producers

(Ybn)	1980	1981	1982	1983*
Nippon Steel	165	220	300	259
Kawasaki Steel	65	100.5	138.2	138.7
Nippon Kokan†	46.4	93.1	164	186.4
Sumitomo Metal Inds	102.1	128.2	180	155
Kobe Steel†	64.5	71.9	64.8	89.4

*Company estimates †Steel divisions only
Source: Nomura Securities.

Electronics at the centre of research activity

Car design

ROY GARNER

THE SEARCH for improvements in car design through the introduction of increasingly sophisticated electronics equipment is a trend which can be discerned worldwide. In Japan, however, the switch in emphasis is especially fast-moving and has gained added impetus as an indirect result of the nation's difficulties in export markets.

The introduction of import ceilings in the U.S. and the protectionist sentiments in European markets has recently caused Japanese companies to focus their attentions once again on the home market. The Japanese car buyer is second to none in terms of what he or she expects in the area of operational efficiency, particularly in fuel economy and overal durability, and also in the installation of the latest in new electronic gadgetry.

Each of the big Japanese makers supports a vast array of different car "models," and it is to high-tech innovation that they now look to satisfy the demand for constant improvements on these familiar basic designs.

The home market is also particularly testing because of the uniquely strict design specifications imposed by the Japanese Government, especially concerning exhaust emission and noise pollution. As a result, visitors to the Tokyo Motor Show in November were able to browse over futuristic innovations which included everything from the centralised computer control of engine performance and electronic skid control, to inertial navigation systems and windscreen wipers which are activated automatically by raindrops.

Other forms of design innovation constitute a significant part of Japanese R&D programmes, notably in the use of new lightweight materials such as ceramics and fibre-reinforced plastics, and in the use of aerodynamically sophisticated styling. It is the application of advanced electronics, however, which lies at the core of research activity.

The introduction of the electronic monitoring and control of engine functions has facilitated drastic improvements in car efficiency and performance. With specific applications including electronically controlled fuel injection, cruising speed regulation, engine idling reduction, ignition timing, diagnostic functions and exhaust cleaning.

The predictable outcome of such a diverse availability of electronic controls has been the introduction of computerised central control systems which co-ordinate all of these functions simultaneously. Nissan's Electronic Concentrated Engine Control System (ECCS) is already available in all of its car series, and Toyota is increasingly introducing its TCCS Toyota Computer Control System, both of which control most of these basic engine functions.

Intensive efforts are being made to improve car performance. These students at Musashi Technological College are checking a newly-developed diesel engine which runs on liquefied hydrogen.

As a measure of how rapidly the electronics revolution is spreading, Toyota estimates that the value of electronic automotive components purchased by the Japanese automobile industry in 1985 will be three times that of 1980.

The timing of the "high-tech" movement is also closely linked to the rapid advances which have been made in the Japanese semi-conductor industry.

Since about 1980, when Japanese mass production techniques succeeded in providing low-priced high quality i/c's, the automobile industry has become one of the largest buyers of the 16K Ram and 64K Ram chips, purchasing approximately Y40bn worth of i/c's in 1981, and it is this ready availability of miniaturised high-performance components which has offered the technical underpinning for the new wave of electronic innovations.

Optical fibres

At the Tokyo Show Nissan introduced its vision of the car of the 1990s, the NX-21. The ceramic gas-turbine engined automobile featured the liberal use of thin lightweight optical fibres as a substitute for the bulkier wiring of conventional cars, another important complementary innovation. Fibre optic wiring offers a greater density and efficiency of signal transmission and is expected to become a familiar feature as improved optical fibre products come on to the market.

The NX-21 also features a magnetic memory card reading system. The card contains a range of information about the drivers preferred settings for the seats and car controls, and these are automatically adjusted once the card, which serves also as an ignition key, is inserted.

The corresponding super-car from Toyota is its FX-1 which, like the NX-21, features a colour CRT display screen upon which the driver can call up visual information about the operating condition of the engine, and self-diagnosis information about developing faults.

The FX-1 also utilises a voice-recognition system which responds to a limited range of pre-set instructions concerning the operation of the cars lights and windscreen wipers.

Several experiments have previously been made with the use of voice-synthesis chips to instruct the driver on such matters as the fastening of seat belts and speed adjustment, but motorists have commonly tended to simply switch these gadgets off once the initial novelty value has waned.

The latest versions offer more worthwhile warnings, telling the driver if he is becoming drowsy or driving too close to the car in front.

It is too early yet, however, to know whether these instruction systems will meet eventually with greater public approval.

Mazda's car of the future, the MX-02, attracted a lot of attention with its computer-controlled four-wheel steering system which allows the rear wheels to be moved sideways for parking manoeuvres, and for more efficient cornering. The MX-02 also features a system which displays essential information on the lower part of the windscreen, allowing the driver to keep his eyes permanently on the road ahead.

Safety features are becoming an increasingly high priority in car design. Electronic sensor devices are now used to monitor the driver's level of alertness in reactions, check the distance being kept between the driver's car and other cars or obstacles ahead, and to give warnings of such dangers as low tyre pressure.

Manufacturers also claim that their electronics equipment will increase safety by reducing the driver's workload. Some argue, however, that the dashboard arrays of these future cars, which often take on more of the appearance of an aircraft flight deck, will, on the contrary, disrupt the driver's attention.

Looking further into the future, Japanese makers express much interest in efficient navigational aid systems. Already Honda has announced an electro gyro-cator unit which uses a sealed helium gas-rate gyro and overlay maps to provide information on the driver's whereabouts.

Sensors

Toyota is experimenting with its computerised Navicom system which can be used to home in on a pre-set destination by use of terrestrial magnetic sensors.

Nissan has also introduced a magnetic drive-guide system.

Makers are aware that the majority of drivers in Japan spend most of their driving hours crawling at low speed through heavy city traffic. Consequently, the accent on internal comfort is also strong. Recently introduced luxury features include Digital Audio Disc sound systems, seats with inbuilt speakers and vibrators, which allow passengers to "feel" the sound, and increasingly sophisticated air-conditioning systems.

Electronic wizardry is also becoming important as a measure of status. The increasingly affluent younger generation of Japanese in particular have grown to expect a great deal in terms of new gadgetry when choosing a new car, and as a result makers, through their own actions, have found themselves engaged in a sometimes frantic race to satisfy these raised expectations.

Hope for growth by diversifying

Textiles

JOHN BURTON

THE TEXTILE industry frequently has been described as one of the main engines of growth which pulled Japan into the industrial age. Now Japanese textile companies are looking to high-tech industries, ranging from biotechnology to consumer electronics, to pull themselves out of trouble.

When the first oil shock struck in 1973, makers of man-made fibres saw their raw material costs skyrocket. That coincided with the spread of manufacturing plants for the three mainstay synthetic fibres —polyester, nylon and acrylic fibres— to countries that enjoyed lower labour costs, such as South Korea and Taiwan.

Decline

The result was that the Japanese textile industry, besieged by cheaper imports at a time of market stagnation, experienced a sharp decline in sales and profit growth, a position from which it has not yet recovered.

Unlike other depressed industries in Japan, such as petrochemicals and aluminium, textile manufacturers quickly adjusted to hard times by aggressively pursuing diversification into industries that shared some of the same know-how required for synthetic fibres.

That activity has clustered around four main areas: biotechnology, medical equipment and new industrial and electronics materials.

The textile industry's foray into biotechnology has received the greatest attention because of the market's potential growth. Toray, Japan's largest synthetic fibre manufacturer, is expected shortly to get approval from the Ministry of Health and Welfare to start production of the anti-cancer drug beta-type interferon.

Toray would be the first licensed manufacturer of the drug in the world and it has already announced plans to begin construction of a plant for the drug next July. However, beta-type interferon will be produced through a mass cell culture process, considered less efficient than gene-splicing (recombinant DNA), and its market potential may be limited by the fact that it can fight only certain types of cancer.

For that reason, Toray has funded research by Genetech in developing gamma-type interferon, which has greater commercial possibilities because of its versatility and its production through gene-splicing. In return for its financial support, Toray would receive marketing rights for the drug in the Far East.

Competing with Toray in the anti-cancer drug field is Teijin, the largest polyester maker in Japan. Teijin already has a fairly prosperous pharmaceutical business based on the manufacture of Venilon, a drug for treating severe infections. Its drug subsidiary, Teijin Pharmaceuticals, which had a recurring profit of Y1.2bn ($5.1m) in financial year 1982 on sales of Y15.7bn ($67m) was amalgamated into the parent company on October 1 to boost its profit picture.

Teijin is developing monoclonal antibodies for fighting cancer with Hybritech in the U.S. and is co-operating with Biogen on an anti-hemophilia drug as well as with Fujisawa Pharmaceutical, its marketing agency for Venilon, on a prostaglandin.

Meanwhile Toyobo, Japan's eighth largest textile maker, is involving itself in the manufacturing sector of biotechnology by producing enzymes for research and production.

Textile manufacturers have expanded also into the related area of medical equipment. Asahi Chemical, Kuraray, Toray, Teijin and Toyobo are producing artificial kidneys, or dialysers, and Asahi Chemical and Kuraray are also making equipment for blood separation.

A more mature industry for textile companies is the production of new industrial materials, chief among which is polyacrylonitrile (PAN) carbon fibres. Although carbon fibres were developed for use in aircraft components, the first practical market was in sports goods, for example to strengthen the shafts of golf clubs. The market greatly expanded when the aircraft industry began to find effective ways of using it in the manufacture of its components. Since it is stronger than steel but lighter than aluminium, carbon fibre is replacing metal alloys in the assembly of wing flaps, for example.

Toray has become the world's largest producer of carbon fibres, with more than a 50 per cent share of the world market, and it and Toho Rayon are supplying the material for Boeing 767s, which uses about a ton of carbon fibres each.

However, Toray experienced difficulties in its carbon fibre sector last year with sales in the first half of financial year 1982 falling below the level for the second half of 1981 because of a slump in orders for aircraft. Although Toray considers the setback to be temporary, it is seeking out other markets for carbon fibres such as centrifugal separation equipment for uranium enrichment.

Attracted by Toray's past success, other textile companies including Teijin and Nitto Boseki, are entering the carbon fibre field and the same companies are also pursuing development of other new materials such as fine ceramics (Toray, Ashai Chemical), aramid fibres (Teijin, Toray and Asahi Chemical), and optical fibres (Mitsubishi Rayon).

Opportunities

The booming demand for consumer electronics has been a godsend to the sagging polyester market. Textile companies are supplying polyester film as a basic material for the manufacture of VCR tapes, with Toray having roughly half of that market. And electronics are also providing other opportunities. Toray is making tough plastics to replace ceramics in IC packaging, and Asahi Chemical, Mitsubishi Rayon and Toyobo are producing similar electronic materials.

Although the diversified businesses represent a small share of total sales, averaging about 25-30 per cent in the case of the top ten textile companies, they have been the main source of profits. Asahi Chemical, Toray and Teijin, for example, had the best earnings performance in financial 1982 among synthetic textile makers because of their emphasis on non-textile business. Latecomers to diversification, such as Unitika and Mitsubishi Rayon, suffered profit losses.

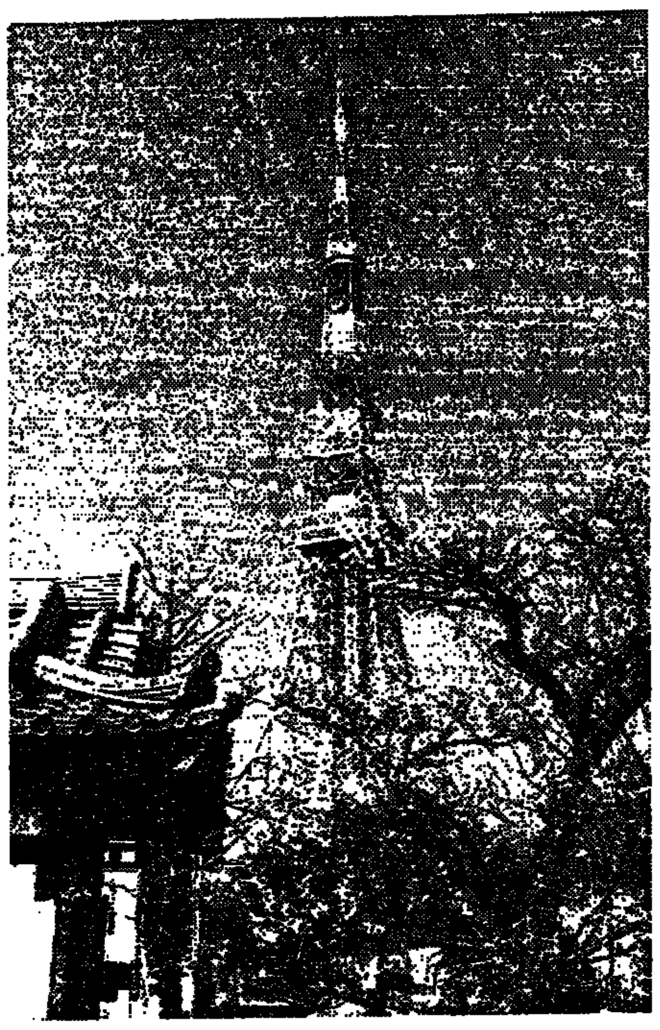
However, textile executives, such as Toray President Yoshikazu Ito, concede there is no guarantee that diversification can rescue the textile industry from a dim future. He describes the company's interferon project, for example, as a "trial balloon" for future activity in the biotechnology area.

That means the textile industry is not depending wholly on diversification to solve its financial problems. Instead, it is looking to improved automation to make production competitive once again. Eight major synthetic fibre makers agreed this past summer to jointly fund a Y2.3bn project that would cut the production time for polymerisation, spinning, crimpling and winding.

The new equipment would replace facilities now at least a decade old and cut energy costs by 50 per cent and labour costs by 40 per cent. But the textile industry must wait another five years before the equipment is commercialised and the huge costs in replacing current facilities will reduce profits initially.

The Ministry of International Trade and Industry believes, however, that the textile industry can make a comeback. It notes that the new textile technology will increase price competitiveness at a time when the wage disparity enjoyed by developing countries is narrowing.

Uncertainty as latest cartel expires



Tokyo Tower, one of the city's main landmarks. Japan has five commercial TV channels and the first cable station is on the way

Cement

BARBARA CASASSUS

THE CEMENT industry will have little to celebrate as it enters the New Year. The official cartel set up in August to reverse the drop in domestic prices will expire on December 31, almost certainly without coming anywhere near target, but with no certainty of what will happen next.

For the five-month duration of the cartel, output has been trimmed by 3.8 per cent and sales in the Japanese market by 2.5 per cent, against the same period of last year, in an effort to drive prices up from about Y13,000 ($55) a ton for bulk cement to Y15,000 ($64) or more.

But despite a compensating fall in energy costs — Japan's coal import prices have fallen 20 to 25 per cent since last year —the target is recognised as too ambitious in view of the extent of the demand slump and analysts now predict Y13,400 will probably be the limit of the recovery.

Apart from the decline in cement demand for the key public sector, pressure on prices has been intensified by cut-throat competition among ready-mixed concrete manufacturers, which are acknowledged to be too numerous and whose special tax and other financial concessions are due to end next March.

Meanwhile, cement makers are operating at an average of 63 per cent of capacity, with some plants completely shut down, and profits have tumbled, in several cases creating or deepening losses.

Rather than seek an extension of the cartel, the 24-company industry is preparing a plan to restructure marketing and distribution, which it will submit to the Ministry of International Trade and Industry (MITI) for listing under a second basic materials industry depression law enacted in April this year. If it is approved, manufacturers will be eligible for various government subsidies, tax benefits and other financial assistance to restore order to their operations and market.

Based on Japan Cement Association forecasts that domestic demand will average 75m tons and exports 10m tons annually over the next five years, makers are discussing a proposal to scrap 25m tons or about 20 per cent of their present total production capacity of 120m tons.

Furthermore, they would amalgamate their sales and distribution functions into five groups headed by Mitsubishi Mining and Cement, Onoda Cement, Nihon Cement, Sumitomo Cement and possibly Ube Industries, with effect from April 1984. But apparently negotions are faltering over smaller independent companies' opposition to this idea, for fear they would be swallowed by the giants if the industry is restructured along such narrow lines.

According to recent figures, after slipping for four years running, sales in fiscal 1983 (ending on March 31 1984) are projected to rise slightly to 84.670 tons from 84,330 tons in 1982, because of a surge in exports to the Middle East. Although domestic volumes were expected to be down from 72,370 tons to 70,350 tons. the government's economic package announced on October 21 offers some respite to the effects of its austerity spending programme.

An additional Y1.88 trillion was allocated for public works in the second half of fiscal 1983, about half of it to go for repairs after this year's earthquake and heavy rain damage. As Sumitoro, Onoda and Ube are strong in the affected areas, securities analysts tip them for investors because they are likely to secure a good share of orders for the extra 2.8m tons of cement needed for the works.

To offset the decline in domestic offtake and keep plants operating, manufacturers have stepped up exports this year, despite a price fall of more than 20 per cent compared to 1982. Total volume is expected to reach 14m tons, up from 11m tons, and should give Japan the edge over Spain as the top world exporter.

In recent years, the Middle East has overtaken South-east Asia by a two-to-one margin as the main regional market, with Saudi Arabia remaining in front against all post-oil price cut expectations.

As3 in other materials industries, manufacturers are looking over their shoulders at neighbouring rivals in South Korea and Taiwan.

Adversary

In the short-term, there is less concern about competition from South Korea, as it prepares for the Asian Games in 1986 and the Olympic Games in 1988, but Taiwan is proving more of a formidable adversary. It is said to have increased cement output capacity from 18m to 22m tons against dwindling domestic demand and is said to have set up an unauthorised cartel to bolster its export effort.

Although its fortunes are not healthy at the moment, the industry derives comfort from what is regarded as its superior production technology and energy savings resulting from its 99 per cent complete switch from oil to coal, financed in part by Japan Development Bank (JDB) loans.

At today's prices, the savings amount to about 50 per cent on the basis of Btu equivalence and have been enhanced by the spread of dry-process New Suspension Preheater kilns, which represented 93 per cent of the total at the end of 1982, and calcinator furnaces to improve fuel efficiency.

On the other hand, the energy bill suffers from the fact that 20 per cent of the industry's coal purchases have to come from Japanese mines and costs manufacturers $80 a ton compared to $50 a ton for imports.

At the same time, blaming inflated requirement projections when deals were negotiated, suppliers complain that not a single ton has been lifted so far this year under certain long-term contracts with the cement industry.

The main exporting country involved is Australia, the only one with sufficient spare mining capacity to meet the new demand in 1979, when much of the conversion from oil took place.

While the present state of the cement market adds impetus to diversification, makers are trying to break new ground also to increase the value-added element of their operations. One area they are concentrating on is fine ceramics, for which they have a solid foundation with their existing burning and grinding technology and highly-skilled chemists.

However, only one company, Mitsubishi Mining, is producing only on a limited scale, although others are gearing up to enter commercially so far, and then the field in some way. At the moment, Mitsubishi is producing four ceramic electronic components; capacitors (the main product), thermistors, ring varistors and surge absorbers.

It opened a second Y1.2bn plant this year, next to its central laboratory at its Yokoze Plant in Saitama Prefecture, and plans to build a third in the next few years. Sales of electro-ceramics are projected at Y1.5bn in fiscal 1983 and Y3bn in 1984, while clinical trials on artificial bones made of hydroxyapatite are about to begin with a target launch date of 1986.

Cement manufacturers are trying to keep their plans for fine ceramics firmly under wraps, but all the major companies and some of the smaller ones are at the research and development stage with electronic parts, engineering ceramics, basic materials or a combination of the three.

In some cases, they are aiming for the operation to represent 5 to 10 per cent of sales by the early 1990s. Other examples of manufacturers' moves into new materials are Onoda's tie-up with Daichi Metco to supply ceramic plasma flame spray, a coating material for sensors, and Nihon Cement's Calmmite non-explosive demolition agent.

Clearly, those diversification plans are not far enough advanced to extricate the industry from its immediate plight. Meanwhile no one has forgotten that cement prices fell after the last two cartels were dissolved in January 1976 and December 1977.

Consumer-oriented services have become one of the fastest-growing sectors of Japan's economy in the past year. Charles Smith interviews two pioneers in this field

PROFILE: HIROYOSHI ISHIBASHI

On top of the weather

HIROYOSHI ISHIBASHI is a 36-year-old language graduate of a major Tokyo university who now runs Japan's largest "customised" weather forecasting company, the Japanese affiliate of the U.S. Ocean Routes group.

When Ishibashi joined Ocean Routes' Tokyo office 11 years ago it consisted of "two retired master mariners and three cute girls" whose job was to maintain liaison with Japanese shipping lines that were buying the U.S. company's forecasts on Pacific routes. Today Ocean Routes Japan earns 45 per cent of group revenue, and is itself 40 per cent dependent on forecasts that are sold to individual on-shore clients.

Ocean Routes' first land-based customer was the largest baseball stadium in Tokyo which pays $2,500 per month for a 36-hour ahead local forecast covering days when it plans to hold a match. Other customers include Tokyo Disneyland and a number of major food companies in Tokyo which specialse in picnic lunch boxes.

Although localised weather forecasts now constitute the fastest growing part of its business, Ocean Routes "went on land" gradually and without any advance planning on the part of its management. The process began when shipping clients started asking for dockside weather forecasts and later for forecasts covering areas over which containers were being shipped to the dock. The company realised in about 1976 that specific forecasts designed for the organisers of public events could be a valuable extension of this business.

The Korakuen Baseball Stadium saves money on food for 25,000 people every time an Ocean Routes forecast causes it to cancel a match because of poor weather conditions. Updated weather reports during the match itself broadcast over Korakuen's public address system to 50,000 people help baseball fans to decide to sit through a shower or give up and go home. They also provide free publicity for Ishibashi's company which may explain why it has never needed to advertise.

Ocean Routes Japan is now earning about Y300m per year from customised on-land weather forecasts and Ishibashi claims the figure is trebling at 12-month intervals. He attributes this partly to technical progress, mainly in the computer field, which has transformed the speed at which highly accurate weather forecasts can be prepared for specific areas and partly to changing economic conditions in Japan.

During the "rapid growth" era before 1973 most Japanese companies sought profits by stepping up sales volume. Now, says Ishibashi, a beer company or a manufacturer of room coolers will pay heavily for accurate weather data which will enable it to adjust its inventory or decide when to launch a sales campaign.

Ishibashi says he aims at a 92 per cent rate of accuracy over a 24-hour period in his forecasts for Korakuen and other public events clients but his contracts with such companies provide full payment only if the accuracy range is between 80 and 85 per cent. A better than 85 per cent performance earns the company a 10 per cent bonus from the client while a 30 per cent penalty is payable on a forecast that turns out less than 80 per cent accurate.

Ocean Routes forecasts are based on a mixture of the company's own data and material provided by the Japan Meteorological Agency (JMA) but the company is not allowed to contradict anything that JMA says about theweather outlook on a given day. What it can do is to offer more specific customer-related forecasts than JMA is able to do.

Ishibashi decided to get into the weather forecasting business after a lumber carrier he was in charge of while working as an executive of a big Japanese trading company was wrecked in a typhoon in the early 1970s. Ishibashi felt the wreck — in which 15 people died — could have been averted by better forecasting and decided to start doing something about the problem himself.

The decision may have been idealistic but it also turned out to be a lucky one. Whereas Ocean Routes is now a fast-growing and flourishing enterprise, Ataka and Company, Ishibashi's former employer, lost heavily on Canadian oil investment and was liquidated three years after he left.

PROFILE: KATSUYOSHI UKON

Success route of a handyman

KATSUYOSHI UKON is typical of the go-it-alone entrepreneurs who have been setting up new businesses in Japan's service sector. Mr Ukon, now aged 43, makes Y20m to 30m per year as a professional handyman in the widest sense of the word. Not only that, he has established a network of some 50 handymen around Japan, all of whom originally studied the business at Mr Ukon's home in a suburb of western Tokyo.

Mr Ukon even has seven overseas "affiliates" — Japanese living abroad who have set up as odd job specialists working for other Japanese residents in the U.S., Brazil, France and New Zealand. Between them Mr Ukon and his pupils constitute a small but significant new "industry" with a growth rate which probably exceeds that of any of Japan's major manufacturing sectors.

Mr Ukon decided to set up as a professional handyman in 1977 after watching a TV programme about a man who resigned from a safe job in business and failed to make a go of being a handyman.

Mr Ukor's approach was simple but effective. He printed a handbill listing some two dozen different types of services he was willing to perform (from minor mechanical repairs to advice on filling in tax statements) and delivered it personally to 1,000 or so houses in his neighbourhood. Within six weeks he had picked up Y860,000-worth ($3,706) of orders from 102 households and from then on the business never stopped growing.

Mr Ukon says that although his business has succeeded far beyond original expectations, the types of jobs he is asked to do in Tokyo have been different from those he expected to get.

Mechanical repairs and advice on legal matters (which his law degree from a major Tokyo university qualifies him to give) are in relatively small demand. What constitutes the bulk of the business are small-scale "errand" type jobs such as shopping or house-cleaning. Ukon charges Y3,000 (his minimum rate for any job) to pick up one copy of a newspaper for someone who is to busy (or to lazy) to go to the news stand for himself. A trip to the centre of Tokyo to buy two cinema tickets (costing Y2,000 each) will cost the client Y20,000 in professional "expenses."

Apart from everyday errands Mr Yukon and his colleagues have been given "jobs" staying in empty hotels (to give the impression that the establishments are thriving), standing in as speech-makers at weddings, and eating meals cooked by lonely housewives.

Antarctic

Two of Mr Ukon's more exotic overseas assignments have included going to Singapore to repair a refrigerator for a Japanese resident who did not want to call up a local repairman and visting the Antartic to bring back a stone for a collector.

The secret of being a handyman, according to Mr Ukon, is to insist on being paid for every service you perform no matter how pointless the service may appear to be or how little effort is required to perform it. Demand reflects the fact that big Japanese cities such as Tokyo now contain large numbers of wealthy and lonely people who are willing to pay seemingly extravagant prices for trivial services.

As to his motives, and those of his colleagues, Mr Ukon points out that he is earning six to 10 times more in his present occupation than he was as a water heater repairer for Tokyo Gas in the mid-1970s. To run your own business can be extremely lucrative, he says, but results are far from guaranteed. On a rough estimate only about 3 per cent of the Japanese men who leave big companies in their 30s or 40s to start new businesses do become successful entrepreneurs.

Changing tastes bring boom

Hotels

BARBARA CASASSUS

THE FOURTH hotel construction boom in 20 years threatens to swamp Japan with an oversupply of rooms, despite new demand from both foreign visitors, until recently the mainstay of the business, and the Japanese.

The widening of the Western-style hotels market, reflecting the changing tastes of the Japanese, has virtually eclipsed traditional inns (ryokan) in the two main cities of Tokyo and Osaka and is expected to have a similar impact elsewhere in the country.

The latest boom is partly in response to the opening of the new Tokyo Disneyland—the first outside the U.S.—last April and in preparation for the Tsukuba Scientific Expo in 1985. The first two booms were triggered by the 1964 Tokyo Olympics and Expo '70 in Osaka and the third was dubbed the "boom without events." In that case, the target customers were Japanese and the new hotels were medium class with rooms of about 20 sq metres.

However, the present period of expansion involves both rooms fo 35 sq metres, considered the minimum for top-flight hotels for foreign visitors, and their smaller counterparts, and is nationwide instead of concentrated in the major urban areas.

10,000 rooms

Nonetheless, over the next five years an estimated 10,000 rooms will be added to the present 36,000 in Tokyo and another 5,000 will be built in Osaka, where experts regard future demand projections as particularly over-optimistic.

Growth in Tokyo will focus primarily on inner suburbs, such as Shinjuku, Ikebukuro Shibuya. It will be especially rapid in Shinjuku, where Japan's third largest hotel group, Fujita Tourist Enterprises, opens a 1,300-room Washington hotel this month, to be followed by an 800-room Hilton next year and a 500-room extension of the 500-room Sunroute in 1986-87.

Lining up alongside the present 5,000 rooms, the new openings will make Shinjuku Tokyo's largest hotel district and will undoubtedly create stiff competition. The impetus for development comes from the relocation of a number of offices, the potential for offering non-stay services Japanese from the surrounding residential areas and the fact that 7,000 sq metre plots of land needed to build 1,000-room hotels are no longer available in the centre of the capital.

To place the intra-Tokyo competition in perspective, however, the number of Shinjuku-based large companies (capitalised at Y100m and over) are still outnumbered almost ten to one by those in central areas, where the established hotels fear no more than a slight erosion of turnover, according to some expects.

There could be a temporary lull in demand while the market adjusts to the new supply, but occupancy rates are not expected to remain at under the current 80 per cent for long.

In Osaka, the outlook is gloomier as saturation point approaches and occupation rates are predicted to slide to about 70 per cent and stay there.

The popularity of Western-style hotels among the Japanese is a direct effect of the country's more open international view. Since overseas travel was liberalised in 1969 the number of Japanese going abroad has soared from some 700,000 to more than 4m a year. In the process, they have become accustomed to the privacy, comfort and relative safety provided in the West—traditional ryokan are built of wood and are therefore high fire risks.

Although room occupancy rates in Shinjuku rise to 95 per cent on Saturdays from 75 per cent on weekdays, in an apparent quirk to cater to the peculariarly Japanese propensity for "love hotels," demand from the indigenous population hinges largely on other services. For hotels in the U.S., rooms account for 60 per cent of sales and other facilities 40 per cent, whereas in Japan, the comparable figures are 30 per cent and 70 per cent.

This 70 per cent is composed mainly of official functions and highly lucrative wedding receptions. Perhaps only the more affluent can afford the Y4m to Y5m charged by one top Tokyo hotel for a wedding reception with 100 guests, but a lavish party to celebrate marriage is indispensable to all Japanese and prompts many parents to start a special savings funds for the event virtually the day a child is born.

The bill might seem expensive, but apart from the food and drink, it does include hire of the bride's white wedding dress and kimono, hairdresser and barber for the bridal couple and the requisite gifts for the guests.

One factor perhaps alleviating oversupply pressure on Tokyo's hotels is that the city is almost always on the itineraries of foreign visitors, whether they come to Japan for business or as tourists. From under 1m in 1970, overseas visitors are projected to total more than 2m this year. This is due in part to an increase in trans-Pacific flights, the opening of Tokyo Disneyland in nearby Urayasu and further relaxation of neighbouring Asian countries' travel restrictions. Taiwan eased its regulations in 1979, which had an effect on the 1980 figures, and South Korea lifted some curbs this year. The weakness of the yen has also acted as a stimulus to the flow of foreign visitors recently.

Japan's capsule hotels, at $12 a night, are part of the latest hotel construction boom. A console inside each cubicle controls radio and TV, air conditioning and lights.

Mushrooming

Although the hotel industry is mushrooming, potential for foreign operators appears less than dazzling. Moreover, the five-year new room count excludes any further overseas entrants to the fray. The 20-year management contract held by Hilton International for the Tokyo Hilton will not be renewed when it expires at the end of this month. Instead, the hotel will be run by its owners, Tokyu Hotel Chain Co., a subsidiary of the Tokyu Corporation, and will be renamed Capitol Tokyo.

As a general rule, sources suggest that with their years of experience and training in the U.S. and Europe, the Japanese do not need foreign expertise now. Therefore, the chances of foreign groups obtaining management contracts appear slim, unless they are prepared to commit themselves financially, either through joint ventures, equity participations or at least loan guarantees.

Nevertheless, Hilton International, which will manage the Hilton Hotel in Shinjuku, will hold a bigger stake than its leading Japanese partner, Nippon Fire and Marine Insurance. Also, several foreign groups, including Sheraton and Hong Kong's Regent International, are interested in establishing themselves near Disneyland, while Trust House Forte and Hilton Corporation are understood to be looking at the Tokyo area.

Altogether, representatives of some six U.S. and two European groups have visited Japan recently to sound out the potential. One possibility is forming partnerships with life insurance and real estate companies whose moves into the hotel business are motivated by the desire to own buildings, not to diversify into hotel management.

However sanguine some Japanese operators appear about new arrivals, they are planning to step up new services, promotions and other features to ensure they keep regular customers and to lure others away from their competitors. Top-class hotels are introducing facilities such as non-profit-making executive lounges, where businessmen are provided with secretarial, translation, data gathering, copying and meeting-room services and also a one-day turnround for visiting cards.

Another factor is service itself. The 21-year-old Hotel Okura in central Tokyo, which was voted second best in the world in a financial magazine's poll of bankers, explains its high rating by the standard of its service, achieved by thorough personnel training in Japan and abroad at other hotels in the group.

For a homogenous people, Japan's hotel industry is possibly surprisingly catholic. It encompasses not only Western-style and traditional establishments, but also growing numbers of capsule hotels—cubby holes where men sleep off their sake at relatively moderate cost—and love hotels, where couples go to find the privacy their small homes lack. The latter are reported to represent a phenomenal Y3 trillion a year, equivalent to about 1 per cent of the GNP.

More leisure for pleasure

Leisure

JUREK MARTIN

CURRENTLY, the walls of the Tokyo underground are plastered with one particularly eye-catching poster. It features Japan's best golfer, Tsuneyuki Nakajima, at the completion of his picture-perfect swing. In his hands is a Vanguard driver, the most expensive of which, with graphite shaft and head, costs Y90,000, or very nearly $400.

The advertisement symbolises the nature of the Japanese leisure market and industry in what is an increasingly affluent consumer society, where 13 per cent of national income is spent on the pursuit of pleasure. In enjoyment, as well as in so many other aspects of life, the Japanese are perfectly prepared to pay a premium price for quality, all the more so if it can be seen to incorporate the latest in technological developments.

For all the national tendency to "fads" and "booms," this does not mean that the nation is eternally in the grip of the latest piece of technological wizardry spewed out by Japanese and, in the case of sports, foreign industry. Statistics continue to demonstrate that traditional pastimes which long predated the first metal alloy, let alone the first integrated circuit, retain a strong appeal. Pursuits such as flower arrangement and Go, the intricate board game, appear to be as popular as ever.

But it is undeniable that the fastest-growing leisure sectors are those whose hardware and software do not come cheap and which are also susceptible to technological innovation.

Apart from watching television and eating out, the most popular Japanese pastime is travel, with trips overseas accounting for an increasing share of the business. According to the Leisure Research Centre, a quasi-governmental institute, in 1982 the cost of foreign travel amounted to in excess of Y400,000 per head, almost double the amount spent by those participating in the next most expensive activity, hang-gliding and sky diving.

The travel boom undoubtedly is a major factor in the growth of the video business, as Japanese manufacturers have sought to meet growing demand for better, more sophisticated, lightweight video cameras, to record on film what has been seen elsewhere.

In tandem with the growth in travel is a very discernible national concern over physical fitness; Japan's diet is much richer and more varied than it was even 25 years ago and obesity, which, outside the specialised world of sumo wrestling, has never been a national characteristic, has become more noticeable.

Here, the real growth has been in the provision of services rather than hardware. Studios for aerobic dancing, replete again with both personal and filmed instruction, have proliferated in recent years: in the opinion of the Leisure Research Centre, the industry is likely to expand nearly threefold in the years ahead.

Runners

Though the Japanese have been manic runners for some time and though companies traditionally have organised their employees into morning pre-work exercise routine, the expansion in aerobic and jazz dancing is yet another manifestation of the burgeoning spending power of the Japanese woman. For example, it is generally believed that it was women who initiated and then sustained the tennis boom in Japan: the number of tennis players rose from only 5m in 1976 to nearly 14m last year and it is significant that the marketing of tennis gear, including the latest metal rackets and clothing, is directed principally at women.

However, the general interest in fitness has spawned a substantial industry in the provision of sports complexes, of which perhaps the best known in Japan is the "Do Sports" chain of mostly indoor recreation centres. Although the physical properties of a Do Sports plaza, swimming pools, tennis and squash courts, running tracks, saunas etc, are internationally unexceptional, they are run on uniquely Japanese lines, even down to the supply of uniform-like sweat shirts, shorts, trunks and shoes to each customer.

The Japanese propensity to do things in groups has provided interesting software and hardware opportunities. The typical executive is likely to spend several evenings a week "entertaining" business contacts; a lot of this will be done, with increasing merriment, in bars, where, by convention, the executive will have his own, marked "keep" bottle of liquor.

A standard evening may involve visits to several bars and used to require that he had several bottles available in different establishments. A new wrinkle, however, is the provision of a simple computerised programme, in which participating bars automatically enter whatever alcohol is consumed into the central system and bill the executive, in possession of the right credit card, later, thus alleviating the need to buy extra bottles.

Since the average Japanese salaryman also likes to sing in the evening, one of the most marked booms in Japanese entertainment has been the proliferation of "karaoke" machines, powerful tape recorders playing background music to accompany the executive who wants to sing into the microphone provided.

So popular have these institutions become that the Tokyo city government has threatened to impose an 11 o'clock curfew on them to reduce the noise nuisance. Clarion, the leading Japanese audio manufacturer, is now finding a healthy export market for what had been assumed to be a unique Japanese institution.

The Japanese willingness to dig deep into the pocket for the best equipment and the cachet which, especially in sporting equipment, is still associated with the best foreign brand names, has enabled foreign manufacturers to do surprisingly well in the Japanese market in the face of intense domestic competition.

It is estimated that 30 per cent of all skis sold in Japan are imported, as are about 25 per cent of all tennis racquets and golf clubs. Market share is believed to be even higher in such specialised activities as mountain climbing and wind surfing.

However, the marketing power of the major Japanese companies manufacturing sporting goods (Yonex, Mizuno and Yamaha, for example) is formidable, as is the increasing quality of their products. Equally noticeable is the diversification of the major electronics companies into athletics-related products.

Computer tennis

Sony, for example, has not only pioneered a computerised tennis training machine but has successfully adapted its expertise in video equipment to production of an immensely sophisticated programme suitable for training Olympics standard athletes.

Mitsubishi Electric's computerised golf trainer has also found a substantial market in a nation in which actually getting on a golf course, let alone paying exorbitant green fees, can be difficult enough.

It is even the case that modern techniques and equipment, such as weight training machines, are entering the traditional world of sumo wrestling, where the acquisition of a vast pot belly through ingesting huge quantities of a high protein stew, plus beer and sake, was once considered the only sure key to success.

This year's new grand champion, Takanosato, attributes his success to weight training methods, while his great rival, the muscular but lightweight (260 lbs) Chiyonofuji, resembles only a distant cousin of the sumo behemoths of legend. Perhaps "ikebana"—the art of flower arrangement—will be next to succumb to the technological age.

Compact disc venture boosts flagging sector

Audio

CHARLES SMITH

JAPAN'S DEPRESSED audio equipment industry has received a small but significant boost this year from a new system of sound-reproduction which owes at least as much to pioneering research and development in Western Europe as to the efforts of Japan's own electronics companies.

The system, known as the compact disc (CD for short), is the world's first commercially available digital sound reproduction system and is claimed to offer far higher fidelity, as well as greater dynamic range, then conventional analogue systems. It was developed jointly by Philips of the Netherlands and Sony Corporation, although Philips claims to have done the greater share of the work before the two companies got together in the spring of 1978.

According to Sony, Philips and Sony worked in parallel from the mid-1970s onwards on the adaptation to sound reproduction of digital encoding techniques used in other areas of advanced electronics and on the use of laser optics for picking up signals from a revolving disc. Sony had advanced far enough with its researches by February 1978 to propose the formation of a committee of Japanese electronics companies to study the introduction of a new digital recording standard.

A month later, in March 1978, Philips announced a digital recording concept using a small 4.5 in diameter disc which immediately caught the imagination of the Japanese manufacturers. The result of the Philips announcement was that Sony and Philips began working together from the summer of 1978 on the details of a new system with individual aspects being undertaken by one or the other company. (Sony, for example, took charge of the development of an error-correcting mechanism which was reinforced from the original Philips concept.)

By June 1980 the system was complete in substance and in October 1981 the first prototype of a digital audio player was shown at an audio fair in Tokyo.

While working out details of their CD system Sony and Philips also started to "sell" the CD standard to other audio makers—a task which was complicated by the existence of two other alternative formats for digital sound reproduction, one of which was sponsored by the powerful Matsushita group. Support for the Sony-Philips CD system and for the AHD system proposed by Matsushita's affiliate, Victor Company of Japan (JVC) was fairly evenly divided in the earlier stages of development with the CD system winning 17 "votes" in the spring of 1981 while another 13 audio companies supported AHD.

By the autumn of 1981, however, Philips and Sony had managed to line up roughly 30 supporters for CD, representing almost the entire Japanese audio equipment industry. The first CD sets appeared on Japan's domestic market in autumn 1982.

Advantages

Sony says that, despite the CD system's obvious advantages over conventional vinyl records (including superior reproduction, longer playing time and the virtual indestructibility of the CD disc itself) it has not caught on in Japan and the outside world at quite the speed anticipated a year or so ago. Production and sales of CD players in the current fiscal year (April 1983 to March 1984) was originally expected to reach 500,000 units but now seem likely to fall about ten per cent short of this target, largely because of a slow start in the U.S.

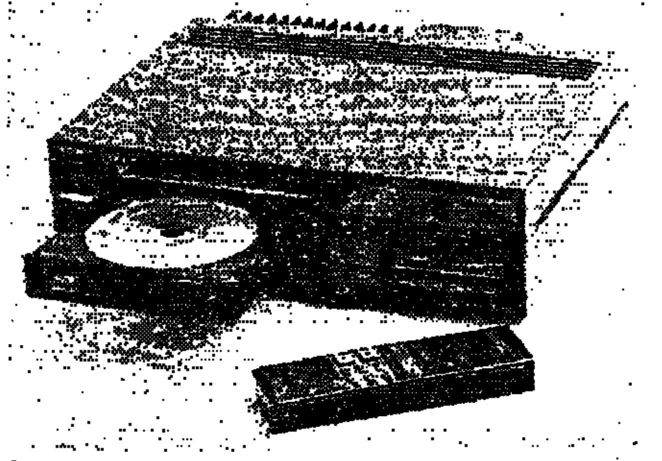
American record manufacturers, who control roughly 50 per cent of the world market for records, initially reacted hesitantly to the technological challenge of producing CD discs (a process more closely resembling the manufacture of integrated circuits than that of stamping or cutting conventional records). However, most of the big U.S. companies now seem to have decided to take the plunge, and Sony expects sales and production of records and discs to grow very fast indeed in 1984-1985.

CD could overtake vinyl records to become the standard form of audio disc in advanced countries by about 1989, Sony believes. By the early 1990s hi-fi enthusiasts would be saying goodbye to vinyl discs and to analogue recording systems together.

Sony's CD players were launched in the Japanese market at between Y168,000 ($717) and Y268,000 ($1,145) depending on the model, with the discs (initially marketed only by CBS Sony) selling at Y3,300 for at least 40 minutes' playing time. Disc prices are expected to remain unchanged, at least for the time being. But Sony says that the cheapest CD player in Japan is now available at a shade under Y100,000 while the price of players in the U.S. has come down from $900 to about $700. Economies of scale are expected to cut the costs of the key integrated circuits used in the compact disc player once sales start rising fast, but the scale economies may not necessarily be equally available to all makers involved.

The success of the CD system is yet another tribute to the flair of Japanese companies for turning good ideas into saleable products in the shortest possible time. However the fact that much of the original development work on the CD system was done by Philips puts an ironic slant on the story. Philips' Japan Manager, Mr R. Appeldoorn, is convinced the company was right in deciding in the late 1970s to throw in its lot with Sony in the development of a new digital recording system rather than to go it alone in trying to establish a system developed in Europe as a world standard.

This does not mean that Philips expects to have an easy time from now on in competing with the Japanese CD manufacturers. The Compact Disc—like video tape recorders before it—could well become the centre of a battle royal between Japan and "indigenous" European manufacturers for control of the European market.



Sony's compact disc is only a few inches across (left) and the player itself is compact. Much of the original development work was done by Philips and the two companies managed to persuade nearly all Japan's audio manufacturers to support the new system. Sony believes that compact disc could replace vinyl records as the standard system by the end of the decade.

Aim to be world supplier

Satellites

JOHN BURTON

COMPETITION IS greatly increasing with Japan's nascent satellite building industry, spurred by growing hopes that the country could become a supplier to the international aerospace market in the next decade.

Japan is slowing approaching the end of what has been a long development phase for its satellite industry, a period that has been characterised by heavy dependence on the U.S. for technological assistance.

The National Space Development Agency (NASDA) believes now that the country has gained sufficient technical prowess for the first satellite to be completely developed and produced in Japan can be launched within the next ten years.

In a classic case of the Japanese Government taking the leading role in developing a new industry, the Ministry of International Trade and Industry and NASDA apportioned satellite work in the early 1970s among three major electronics companies. Each was expected to acquire specification in a particular field by working together with American aerospace companies.

Work on communications satellites went to Mitsubishi Electric, which selected as its partner Ford Aerospace and Communications, prime contractor for the Intelsat series. Broadcast satellites were allotted to Toshiba, which co-operates with General Electric, while meteorological satellites became the province of NEC Corporation, which linked with Hughes Aircraft.

MITI and NASDA now judge that the industry has developed enough to allow the system to be modified. The Government has asked all three companies to jointly develop the fifth experimental technology satellite (ETS-5) and the nation's first Earth resources satellite (ERS-1), similar to NASA's Landsat series.

Two basic advantages are being claimed for joint development. The first is that Japan's bid to achieve self-sufficiency in space technology would be hastened by the companies pooling their resources and expertise. The other is that it would put the companies on roughly the same competitive footing, allowing Japan, and eventually foreign buyers, to choose from among several possible contractors.

For example, by working together on ETS-5, the satellite companies would all become acquainted with technology that would likely to be used on a variety of future Japanese satellites.

The policy change occurred amid growing dissatisfaction within the industry, especially on the part of NEC, about compartmentalising development. NEC decided earlier this year to challenge the system by competing against Mitsubishi Electric for the contract to build Japan's third-generation communications satellite, CS-3.

The prime motivation for NEC's move was the fear that it would lag behind its two competitors if it stuck to manufacturing weather satellites, which are not as profitable as satellites supporting the booming telecommunications sector.

However, NEC's attempt to break out of its allotted role proved futile. As expected, NASDA awarded the contract to Mitsubishi Electric, based on its past experiences. Another disadvantage plaguing NEC was that its role as a newcomer meant that it would have to rely more on American assistance in building CS-3 than Mitsubishi.

Goal

That runs counter to NASDA's stated goal of funding satellites that have as much Japanese content as possible. While NEC was claiming that two-thirds of its CS-3 would be domestically produced, Mitsubishi was saying its version would have 80 per cent local content. As a concession, NEC was given a subcontracting role on CS-3 by supplying the transponders.

Although rebuffed on one front, NEC is now taking aim at breaking Toshiba's monopoly by challenging it for the contract to build Japan'st third-generation broadcast satellite, BS-3. For this try, NEC plans to switch from Hughes, which backed it on CS-3, to RCA Corporation. But NEC is expected to encounter some of the same problems that hampered its CS-3 bid.

While Mitsubishi Electric, Toshiba and NEC are jockeying for positions within their protected preserve, one question being asked is how soon other companies will be allowed into the oligarchical structure dominating the satellite industry.

Hitachi, for example, has made it known that it wants to join the club and it is already planning to take its first step into the field by constructing a satellite test chamber. It is hoping that this will be followed by participation in the ERS-1 project and the more ambitious sixth experimental technology satellite (ERS-6) programme.

If things turn out as expected by NASDA, ETS-6 will be a major milestone in the Japanese space programme. ETS-6 is the prototype for a satellite that will be launched in the late 1990s to link together Nippon Telegraph and Telephone's Information Network System (INS), a digital communications network that will span the country.

But ETS-6 would also constitute Japans declaration of independence from the U.S. in the satellite field since it would be the first all-Japanese satellite, according to NASDA plans. And ETS-6 would thus mark Japan's formal entry into the international satellite market since Japan is now restricted by technical agreements with the U.S. from exporting satellites that contain American technology.

That obstacle would be eliminated once Japan completely develops and produces a satellite on its own.

The key question, though, is whether Japan will have the technical capability to achieve its goal according to schedule. The country's communications satellite programme provides a good yardstick by which to measure. The first two series, CS-1 and CS-2, were largely designed and built by Ford Aerospace under contract to Mitsubishi Electric, which provided some assistance.

For CS-3, details of which were announced last month, Mitsubishi's technical role has grown, although Ford is still providing some of the most vital components. While Mitsubishi will supply the satellite housing and antenna, Ford will provide the equipment to control the satellite's position in geostationary orbit, such as de-spin and apogee kick motors and orbital balance mechanisms.

By the end of the decade, Japan must duplicate this and other technology if it is to become an independent space power.

NASDA has already tested advanced technology to power and control satellites in space, including a three-axis attitude control system, solar cell panels and a mercury ion engine. Mitsubishi Electric is working on a gallium-arsenic solar battery for possible use on CS-3. And Japan is first to use operationally, on CS-2, communications equipment broadcasting over the high-frequency quasi-millimeter wave band, which will make it possible to squeeze communications satellites closer together in geostationary orbit without courting interference.

Dependence

The industry has been carrying out this activity without worrying about American competition in the domestic market. Aware that Japan is loosening its dependence on the U.S. and that time is running short. Washington has been pressuring Japanese government spogee kick motors and orbital agencies, such as NTT, to buy satellites completely built in the U.S.

Despite threats by Washington that it may hold up renewal of an agreement pledging the U.S. Government to buy Japanese telecommunication equipment, Japan has refused to budge. The only concession that Tokyo has been willing to make is to allow Japanese private companies to purchase U.S.-made satellites once they are permitted to enter the domestic telecommunications market, now a government preserve dominated by NTT.

This promise is considered largely rhetorical since there are no plans at present by any company to operate satellites.

Japanese government agencies are expected to be the biggest users of telecommunications satellites through the rest of the decade and into the 1990s and it is almost certain that they will rely on satellites ordered from domestic manufacturers as part of a "buy Japanese" policy.

Nevertheless, Japan is anxious to continue to mine technical information from the U.S. and for this reason is eager to participate in the space station project being proposed by NASA.

NASA has asked both Japanese and West European aerospace companies to become involved in the project to help spread the costs and NASDA recently awarded contracts to eight Japanese companies to conduct feasibility studies on several aspects of the space station.